

Resource Allocation Review



Resource Contention

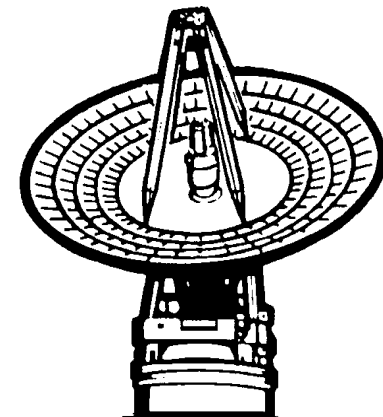
Version 2.1

2001 - 2010

Frank Leppla



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Resource Allocation Review Agenda

- ◆ Loading Study
 - Changes in Requirements
 - User / Mission Planning Set
 - DSN Antenna Implementation
 - DSN Major Downtimes
- ◆ Periods of Contention
- ◆ Requirements Analysis and Recommendations
 - 2001 - 2003 Activities in Contention / Recommendations



Resource Allocation Review Loading Study

Changes in Requirements

New Projects / Major Changes

- CONTOUR moved launch to 07/01/02
- Europa Orbiter moved launch to 01/03/06
- GENESIS moved launch to 02/10/01
- MAP moved launch to 04/19/01
- Solar Stereo Leading and Lagging moved launch to 06/16/04
- Space Technology 3 moved launch to 09/01/05 and extended mission to one year duration



Resource Allocation Review Loading Study

Changes in Requirements (Continued)

Changes in DSN Resource Support Requests

- Cassini modified requests in 2001
- Deep Impact EOPM changed to 08/02/05
- Galileo EOEM changed to 01/22/02
- Geotail, Polar, and Wind EOEM changed to 09/30/05
- Gravity Probe B EOPM changed to 10/31/03
- GSSR added requirements for Mars, Venus, and Asteroids in 2001
- Mars Global Surveyor EOEM changed to 04/28/02
- Mars 01 Surveyor Orbiter EOPM/EOEM changed to 08/01/04 and 09/19/07
- Mars 03 Surveyor Lander modified requests in 2003
- SOHO EOEM changed to 12/30/05
- Ulysses modified requests in 2001



Resource Allocation Review Loading Study

DSN User / Mission Planning Set - Ongoing Projects

Project	Acronym	Launch or Start	EOPM	EOEM
DSS Host Country	DSS	--	--	--
DSN VLBI Clock Sync and Catalog M&E	DSN	--	--	--
DSS Maintenance	DSS	--	--	--
European VLBI Network	EVN	--	--	--
Radio Astronomy	RASA	--	--	--
Space Geodesy	SGP	--	--	--
Voyager 2	VGR2	08/20/77	10/15/89	12/31/19
Voyager 1	VGR1	09/05/77	12/31/80	12/31/19
Goldstone Solar System Radar	GSSR	04/01/85	--	--
Galileo	GLL	10/18/89	12/07/97	01/22/02
Ulysses	ULS	10/06/90	09/11/95	12/31/04
ISTP - Geotail	GEOT	07/24/92	07/24/95	09/30/05
ISTP - Wind	WIND	11/01/94	11/01/97	09/30/05



Resource Allocation Review Loading Study

DSN User / Mission Planning Set - Ongoing Projects (Continued)

Project	Acronym	Launch or Start	EOPM	EOEM
Space VLBI	SVLB	02/01/95	09/30/01	---
ISTP - SOHO	SOHO	12/02/95	05/02/98	12/30/05
Near Earth Asteroid Rendezvous	NEAR	02/17/96	02/14/01	TBD
ISTP - Polar	POLR	02/22/96	08/23/97	09/30/05
Gravity Probe B	GRVB	06/01/96	10/31/03	TBD
Mars Global Surveyor	MGS	11/07/96	02/01/01	04/28/02
Highly Advanced Laboratory for Communications and Astronomy	VSOP	02/12/97	09/30/01	---
Advance Composition Explorer	ACE	08/25/97	02/01/01	02/01/03
Cassini	CAS	10/15/97	06/30/08	06/30/10
NOZOMI (Planet-B)	PLNB	07/03/98	TBD	TBD
Deep Space 1	DS1	10/24/98	09/19/99	10/31/01
Stardust	SDU	02/07/99	01/14/06	---
Chandra X-ray Observatory	CHDR	07/23/99	TBD	TBD



Resource Allocation Review Loading Study

DSN User / Mission Planning Set - Ongoing Projects (Continued)

Project	Acronym	Launch or Start	EOPM	EOEM
Imager for Magnetopause-to-Aurora Global Exploration	IMAG	03/25/00	03/10/02	---
ISTP - Cluster II (First Launch)	CLU2	07/12/00	10/12/02	TBD
ISTP - Cluster II (Second Launch)	CLU2	08/09/00	11/09/02	TBD
Genesis	GNS	02/10/01	10/09/03	---
Mars Surveyor 01 Orbiter	M01O	04/07/01	08/01/04	09/19/07
Microwave Anisotropy Probe	MAP	04/19/01	07/21/03	07/21/06
Space Infrared Telescope Facility	SRTF	12/01/01	02/01/07	---
International Gamma Ray Astrophysics Lab	INTG	04/22/02	06/23/04	06/23/07
Comet Nucleus Tour (CONTOUR)	CNTR	07/01/02	08/31/08	TBD
MUSES - C	MUSC	07/05/02	07/21/06	---
Rosetta	ROSE	01/12/03	07/07/13	---
* Planning dates				
** Planned Landing Date - Surface Operations begin via Comm Relay				



Resource Allocation Review Loading Study

DSN User / Mission Planning Set - Advanced Planning Projects

Project	Acronym	Launch or Start	EOPM	EOEM
Near Earth Asteroid Prospector***	NEAP	09/01/01	07/12/02	07/01/03
RadioAstron*	RADA	10/01/02	10/01/07	TBD
Lunar - A	LUNA	02/03/03	09/21/03	---
Mars Surveyor 03 Lander**	M03L	05/28/03	12/20/03	06/17/04
Mars Express Orbiter	MEO	06/01/03	12/01/05	06/01/08
Deep Impact	DEEP	01/01/04	08/02/05	---
Messenger	MSGR	03/23/04	09/30/10	---
Solar Stereo Leading	SLED	06/16/04	TBD	TBD
Solar Stereo Lagging	SLAG	06/16/04	TBD	TBD
Pluto Kuiper Express	PKE	12/01/04	02/23/18	---
Mars 05 Lander	M05L	08/07/05	10/08/06	04/01/07
Mars 05 Orbiter	M05O	08/07/05	05/12/08	10/30/08
Space Technology 3	ST3	09/01/05	08/31/06	---



Resource Allocation Review Loading Study

DSN User / Mission Planning Set - Advanced Planning Projects (Continued)

Project	Acronym	Launch or Start	EOPM	EOEM
Highly Advanced Laboratory for Communications and Astronomy*	VSP2	01/01/06	01/01/11	---
Europa Orbiter	EURO	01/03/06	TBD	TBD
Solar Probe	SOLP	02/01/07	03/31/15	---
ARISE*	ARSE	01/01/08	01/01/13	---
* Planning dates				
** Planned Landing Date - Surface Operations begin via Comm Relay				
*** DSN Support begins January 2002				



Resource Allocation Review Loading Study

DSN Antenna Implementation

- DSS-14 X-Band Up changed to 7/8/2000
- DSS-26 First Delivery Date changed to 9/15/2002
- DSS-43 X-Band Up changed to 11/6/2000
- DSS-54 Ka-Band Down changed to 1/15/2003
- DSS-63 X-Band Up changed to 10/11/2001



Resource Allocation Review Loading Study

TMOD Resource Implementation Planning Matrix										
Station	Subnet	First Delivery Date	S-Band Down	S-Band Up	X-Band Down	X-Band Up	Ka-Band Down	Ka-Band Up	Ku-Band Up and Down	Close
DSS-14	70M	XXXX	XXXX	XXXX	XXXX	7/8/2000	10/1/2007	N/A	N/A	N/A
DSS-15	34HEF	XXXX	XXXX	N/A	XXXX	XXXX	10/1/2004	N/A	N/A	N/A
DSS-16	26M	XXXX	XXXX	XXXX	N/A	N/A	N/A	N/A	N/A	N/A
DSS-23	11M	XXXX	N/A	N/A	XXXX	XXXX	N/A	N/A	XXXX	12/31/2000
DSS-24	34B1	XXXX	XXXX	XXXX	XXXX	5/15/2004	5/15/2004	N/A	N/A	N/A
DSS-25	34B2	XXXX	N/A	N/A	XXXX	XXXX	XXXX	5/1/2001	N/A	N/A
DSS-26	34B2	9/15/2002	N/A	N/A	9/15/2002	9/15/2002	9/15/2002	N/A	N/A	N/A
DSS-27	34HSB	XXXX	XXXX	XXXX	N/A	N/A	N/A	N/A	N/A	N/A
DSS-28	34B2	TBD	N/A	N/A	TBD	TBD	N/A	N/A	N/A	N/A
DSS-33	11M	XXXX	N/A	N/A	XXXX	XXXX	N/A	N/A	XXXX	12/31/2000
DSS-34	34B1	XXXX	XXXX	XXXX	XXXX	XXXX	12/15/2003	N/A	N/A	N/A
DSS-43	70M	XXXX	XXXX	XXXX	XXXX	11/6/2000	10/1/2008	N/A	N/A	N/A
DSS-45	34HEF	XXXX	XXXX	N/A	XXXX	XXXX	10/1/2005	N/A	N/A	N/A
DSS-46	26M	XXXX	XXXX	XXXX	N/A	N/A	N/A	N/A	N/A	N/A
DSS-53	11M	XXXX	N/A	N/A	XXXX	XXXX	N/A	N/A	XXXX	12/31/2000
DSS-54	34B1	XXXX	XXXX	XXXX	XXXX	XXXX	1/15/2003	N/A	N/A	N/A
DSS-63	70M	XXXX	XXXX	XXXX	XXXX	10/11/2001	10/1/2009	N/A	N/A	N/A
DSS-65	34HEF	XXXX	XXXX	N/A	XXXX	XXXX	10/1/2006	N/A	N/A	N/A
DSS-66	26M	XXXX	XXXX	XXXX	N/A	N/A	N/A	N/A	N/A	N/A
XXXX = Capability Currently Exists N/A = Capability Not Planned										6/28/2000



Resource Allocation Review Loading Study

DSN Major Downtimes

Year	Site	Description	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
2001	DSS 63	70M X-Band Uplink	07/23/01	10/10/01	81	30-41	204	284
2001	DSS 63	NIB - Feedcone Structure	07/23/01	10/10/01	81	30-41	204	284
2001	DSS 63	NIB - Hydrostatic Bearing Regrout	07/23/01	10/10/01	81	30-41	204	284
2001	DSS 63	NIB - Counterweight Rebalance	07/23/01	10/10/01	81	30-41	204	284
2001	DSS 63	NIB - Az Cablewrap Rehab	07/23/01	10/10/01	81	30-41	204	284
2001	DSS 63	NIB - Upgrade 70M Servo Drive	07/23/01	10/10/01	81	30-41	204	284
2001	DSS 63	NIB - Chiller+HtExch HVAC Mods	07/23/01	10/10/01	81	30-41	204	284



Resource Allocation Review Periods of Contention

<u>Item</u>	<u>Year</u>	<u>Period</u>	<u>Weeks</u>	<u>Subnet</u>
01	2001	Early - Mid April	14 - 15	70M
02	2001	Late April - Mid May	16 - 20	70M
03	2001	Late May - Early June	21 - 22	70M
04	2001	Early - Mid June	23 - 24	70M
05	2001	Late June - Early July	25 - 26	70M
06	2001	July	27 - 29	70M
07	2001	Late July	30	DSS-63
08	2001	Late July - Early September	31 - 36	DSS-14, 43
09	2001	Mid September - Early October	37 - 40	DSS-14, 43
10	2001	Early October - December	41 - 52	70M
11	2001	Early April - Late May	14 - 21	34HEF
12	2001	Early April - Late May	14 - 21	34BWG1
13	2001	November - Mid December	46,49-50	DSS-34, 54
14	2001	Mid April - Late July	15 - 29	26M
15	2001	Mid August - Mid September	34 - 37	DSS-16
16	2001	October - November	41,45	26M
17	2001	Late May - Early July	22-25,27	DSS-27



Resource Allocation Review Periods of Contention (Continued)

<u>Item</u>	<u>Year</u>	<u>Period</u>	<u>Weeks</u>	<u>Subnet</u>
18	2002	January - Early February	01 - 05	70M
19	2002	Early February - Mid April	06 - 15	DSS-14
20	2002	Early - Mid March	10 - 11	DSS-43
21	2002	Late April	17	DSS-14
22	2002	Late May - late July	21 - 30	DSS-63
23	2002	Late June - Early July	26 - 27	DSS-14
24	2002	Mid September - Early December	38 - 49	DSS-43
25	2002	Late October - Early November	43 - 45	DSS-14
26	2002	Late September	39	DSS-24, 54
27	2002	Mid June - Early July	24 - 27	34BWG2
28	2002	January - March	01 - 13	26M
29	2002	Late April - Early December	17,21,25,33,41,45,49	26M
30	2002	Late June - Mid July	26 - 29	26M
31	2002	January - March	08 - 13	DSS-27



Resource Allocation Review Periods of Contention (Continued)

<u>Item</u>	<u>Year</u>	<u>Period</u>	<u>Weeks</u>	<u>Subnet</u>
32	2003	Late July - Late August	31 - 34	DSS-63
33	2003	Late October - Early November	46	DSS-14
34	2003	March - Mid May	10 - 18	DSS-15
35	2003	June - Mid July	23 - 29	34HEF
36	2003	Early September - Late October	37 - 43	34HEF
37	2003	Mid November	46	34HEF
38	2003	Late November - December	48 - 52	34HEF
39	2003	November - December	50 - 52	34BWG1
40	2003	January - Late April	01,05,09,13,17	26M
41	2003	Mid June - Mid September	25,29,33,37	DSS-16, 66
42	2003	Late September - Mid December	39 - 51	DSS-46, 66
43	2003	Late September - Mid December	39 - 51	DSS-27



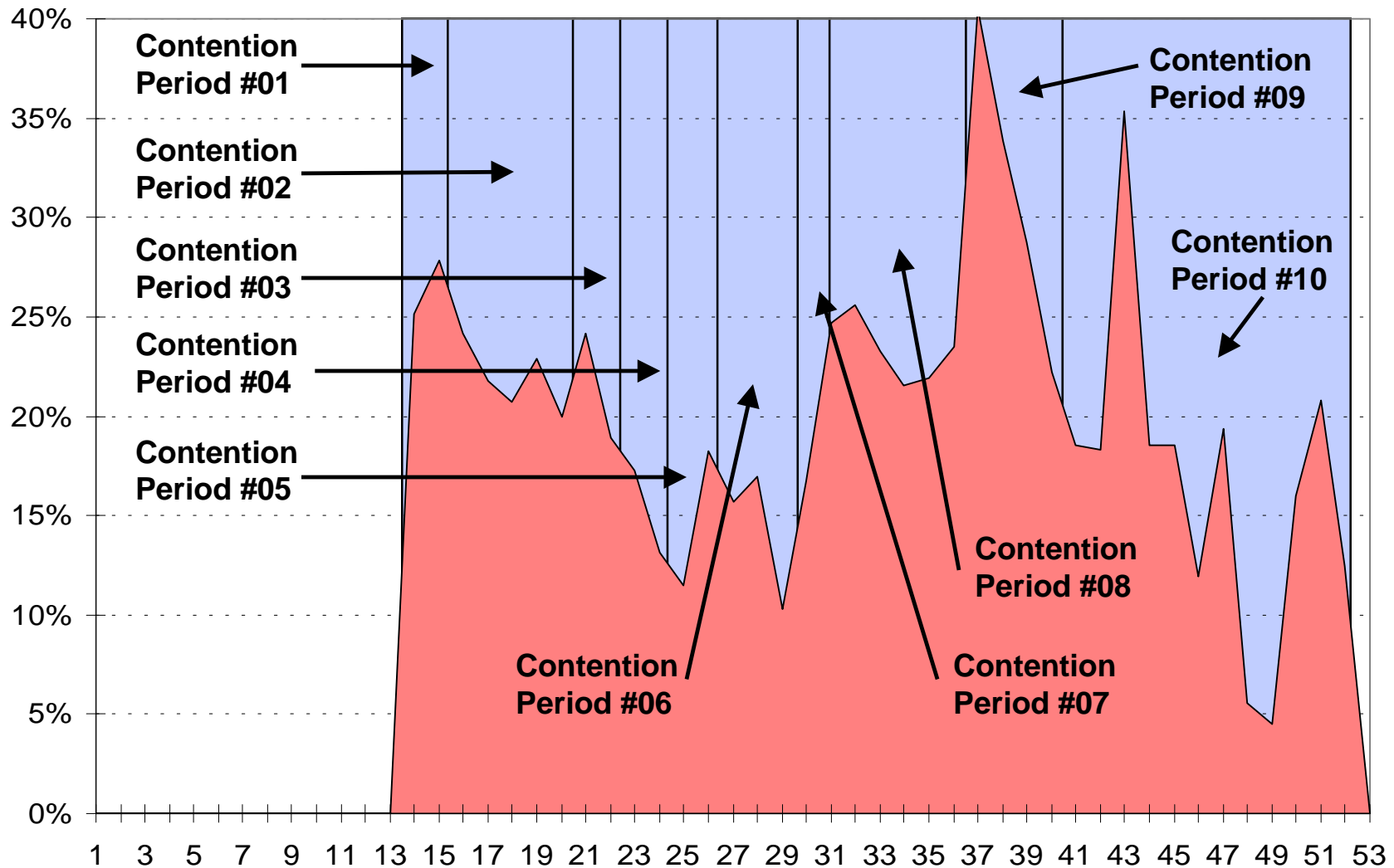
Resource Allocation Review Requirements Analysis and Recommendations

2001 Activities in Contention / Recommendations

Resource Allocation Review

Requirements Analysis and Recommendations

2001 Weekly Contention Percent - 70M



Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #01 - 70M
Early - Mid-April (Weeks 14 - 15)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DS1	ROUTINE SUPPORT, DSS-14, 43, 63/65, 3 - 8 HRS	2
DSS	BEARING/ROUTINE MAINTENANCE, 6 - 10.5 HRS	5 - 6
GLL	ROUTINE SUPPORT	14
GODR	ROUTINE SUPPORT, DSS-14/15, WK 15	1
GSSR	VENUS RADAR SUPPORT, DSS-14/24, WK 15	1
M01O	LAUNCH SUPPORT, DSS-43, 8 - 16 HRS	2 - 6
	TCM SUPPORT, DSS-43, WK 15, 3 HRS	1
RASA	M-WAVE SPECT, 9 HRS	2 - 3
	PLANET R/AST, DSS-14, 9 HRS	1
	RA500 WCB, DSS-14/63, WK 14, 24 HRS	1
	RADIO STARS WCB, DSS-14/63, WK 14, 14 HRS	1
	VLBA WCB, DSS-14/63, WK 14, 8 HRS	1
ULYS	NUTATION SUPPORT, DSS-14, 4 - 8 HRS	3 - 4
	NUTATION SUPPORT, DSS-43, WK 14, 13 HRS	7
	NUTATION SUPPORT, DSS-63, WK 14, 5 HRS	7
	NUTATION SUPPORT, DSS-43, 63, WK 15, 8 HRS	13

Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #01 - 70M
Early - Mid-April (Weeks 14 - 15) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
DS1	REQUESTED SUPPORT USING DSS-14, 43
DSS	REDUCE MAINTENANCE BY 2 HRS AND MOVE DSS-43 MAINTENANCE OFF-SHIFT IN WK 15 (M01O LAUNCH)
GLL	REDUCE TO SEVEN 8 HR SUPPORTS AND FIVE 4 HR SUPPORTS (DSS, GSSR, M01O, ULYS)
GODR	DELETE SUPPORT (DSS, ULYS)
GSSR	REQUESTED SUPPORT AT DSS-14 ONLY (ULYS)
M01O	REQUESTED SUPPORT
RASA	MOVE RA500 TO WK 09, RADIO STARS WCB TO WK 05, AND VLBA WCB SUPPORT TO WK 06 (DS1, DSS, GLL, M01O, ULYS)
ULYS	MOVE THREE DSS-14 SUPPORTS TO DSS-24 (GLL) MOVE THREE DSS-43, WK 14 AND SIX, WK 15 SUPPORTS TO DSS-34 (DSS, GLL, M01O) MOVE THREE DSS-63 SUPPORTS TO DSS-54 (DSS, GLL)



Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #02 - 70M
Late April - Mid-May (Weeks 16 - 20)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DS1	ROUTINE SUPPORT, DSS-14, 43, 63/65, 3 - 8 HRS	2
DSS	BEARING/ROUTINE MAINTENANCE, 6 - 10.5 HRS	5 - 6
EVN	ROUTINE SUPPORT, DSS-14/63, WK 16, 16 HRS	2
GLL	ROUTINE SUPPORT	14
GRVB	ROUTINE SUPPORT, WK 19, 6.5 - 12 HRS	3
GSSR	MARS RADAR, DSS-14, WK 18 - 19	2 - 3
	VENUS RADAR, DSS-14/24, WK 16, 17, 19	1 - 2
RASA	VLBA WCB, DSS-14/63, WK 19, 8 HRS	1
ULYS	NUTATION SUPPORT, DSS-14, WK 16 - 20, 8 HRS	1 - 4
	NUTATION SUPPORT, DSS-43, 63, 8 HRS	13 - 14
VGR1	DTR ARRAY, DSS-14/15, WK 17, DOY 116	1
	MAGROL, DSS-14, WK 18, DOY 124, ASCAL, DOY 121	1



Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #02 - 70M
Late April - Mid-May (Weeks 16 - 20) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
DS1	REQUESTED SUPPORT USING DSS-14, 43
DSS	REDUCE MAINTENANCE BY 2 HRS (GLL, ULYS)
EVN	MOVE SUPPORT TO WK 08 (ULYS)
GLL	REDUCE TO SEVEN 8 HR AND FIVE 4 HR SUPPORTS (ULYS)
GRVB	MOVE SUPPORT TO WK 29 (ULYS)
GSSR	REQUESTED SUPPORT
RASA	MOVE SUPPORT TO WK 07 (ULYS)
ULYS	MOVE 2 - 3 DSS-14 SUPPORTS TO DSS-24, WK 16 - 18 (GLL) MOVE TWO DSS-43 SUPPORTS TO DSS-34 (DSS, GLL) MOVE THREE DSS-63 SUPPORTS TO DSS-54 (DSS, GLL)
VGR1	REQUESTED SUPPORT



Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #03 - 70M
Late May - Early June (Weeks 21 - 22)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DS1	ROUTINE SUPPORT, DSS-14, 43, 63/65, 3 - 8 HRS	1
DSS	BEARING/ROUTINE MAINTENANCE, 6 - 10.5 HRS	5 - 6
EVN	ROUTINE CALIB SUPPORT, DSS-63, 3 HRS	2
GLL	ENCOUNTER AND ROUTINE SUPPORT	14 - 18
GSSR	ASTEROID 1999KW4, DSS-14, WK 21 (7), WK 22 (1)	1 - 7
	MARS RADAR SUPPORT, DSS-14, 4 HRS	1 - 3
MAP	ROUTINE SUPPORT, 45 MIN	7
ULYS	NUTATION SUPPORT, DSS-43, 63, 8 HRS	14
	NUTATION SUPPORT, DSS-14, 8 HRS	1



Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #03 - 70M

Late May - Early June (Weeks 21 - 22) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
DS1	REQUESTED SUPPORT USING DSS-14, 43
DSS	DELETE DSS-14 BEARING MAINTENANCE AND USE OFF-SHIFT MAINTENANCE IN WK 21 (GLL)
EVN	REQUESTED SUPPORT
GLL	REQUESTED SUPPORT FOR ENCOUNTER DURING WK 21 REDUCE TO NINE 4 - 8 HR SUPPORTS IN WK 22 USING DSS-14, 63 (DSS, ULYS)
GSSR	REQUESTED SUPPORT
MAP	REQUESTED SUPPORT
ULYS	MOVE 14 PASSES IN WK 21 AND THREE PASSES IN WK 22 TO DSS-34, 54 (DSS, GLL)



Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #04 - 70M
Early - Mid-June (Weeks 23 - 24)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DS1	ROUTINE SUPPORT, DSS-14, 43, 63/65, 3 - 8 HRS	1
DSS	BEARING/ROUTINE MAINTENANCE	4 - 5
	BEARING REGROUT, DSS-63, 72 HRS	1
GLL	ROUTINE SUPPORT	4
GRVB	ROUTINE SUPPORT, DSS-14, 43, 63, WK 24	3
M01O	DDOR TEST, DSS-14/34, WK 23, 3 HRS	1
ULYS	NUTATION SUPPORT, DSS-43, 63, 8 HRS	14
	NUTATION SUPPORT, DSS-14, 8 HRS	1
VGR2	MAGROL, WK 24, DOY 116	1



Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #04 - 70M
Early - Mid-June (Weeks 23 - 24) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
DS1	REQUESTED SUPPORT USING DSS-14, 43
DSS	DELETE BEARING REGROUT, 72 HRS, DSS-63 (ULYS)
GLL	REQUESTED SUPPORT USING DSS-14, 63 (ULYS)
GRVB	REQUESTED SUPPORT
M01O	REQUESTED SUPPORT
ULYS	MOVE THREE PASSES IN WK 23 AND FOUR PASSES IN WK 24 TO DSS-34, 54 (DSS, VGR2)
VGR2	REQUESTED SUPPORT



Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #05 - 70M
Late June - Early July (Weeks 25 - 26)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DS1	ROUTINE SUPPORT, DSS-14, 43, 63/65, WK 26, 8 HRS	1
	COMET FSIM, DSS-14, 43, 63/65, 10 HRS	2 - 3
DSS	BEARING/ROUTINE MAINTENANCE, 6 - 10.5 HRS	5
GLL	ROUTINE SUPPORT	4 - 14
M01O	DDOR TEST, DSS-14/34, WK 25, 3 HRS	1
RASA	RA500 WCB, DSS-14/63, WK 25, 24 HRS	1
	RADIO STARS, DSS-14/63, WK 26, 14 HRS	1
ULYS	NUTATION SUPPORT, DSS-63, 12 HRS	7
	NUTATION SUPPORT, DSS-14, 12 HRS	1



Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #05 - 70M
Late June - Early July (Weeks 25 - 26) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
DS1	REQUESTED SUPPORT USING DSS-14, 43
DSS	REDUCE MAINTENANCE BY 2 HRS (M01O)
GLL	WK 25, REQUESTED SUPPORT USING DSS-43 WK 26, REDUCE TO SEVEN 8 HR AND FOUR 4 HR SUPPORTS (DS1, DSS, ULYS)
M01O	REQUESTED SUPPORT
RASA	MOVE RA500 WCB TO WK 29. DELETE RADIO STARS (ULYS)
ULYS	MOVE THREE SUPPORTS PER WEEK TO DSS-54 (DSS)

Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #06 - 70M
July (Weeks 27 - 29)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DS1	ROUTINE SUPPORT, DSS-14, 43, 63/65	1
DSS	BEARING/ROUTINE MAINTENANCE, 6 - 10.5 HRS	5 - 6
GLL	ROUTINE SUPPORT	14
M01O	DDOR TEST, DSS-14/34, WK 27 AND 29, 3 HRS	1
	TCM SUPPORT, WK 27, 3 HRS	1
ULYS	NUTATION SUPPORT, DSS- 63, 12 HRS	7

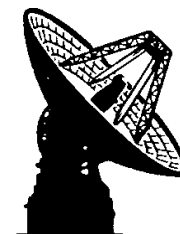
<u>USER</u>	<u>RECOMMENDATION</u>
DS1	REQUESTED SUPPORT USING DSS-14, 43
DSS	REQUESTED SUPPORT
GLL	REDUCE TO 10 SUPPORTS PER WEEK USING DSS-14, 43 (DSS, ULYS)
M01O	REQUESTED SUPPORT
ULYS	MOVE TWO PASSES PER WEEK TO DSS-54 (DSS)



Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #07 - DSS-63
Late July (Week 30)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u> (DOY 204 - 210)
DSS	X-BAND UPLINK DOWNTIME - ADDING ONE WK	
DS1	ROUTINE SUPPORT, DSS-14, 43, 63/65	0 - 1
DSS	ROUTINE MAINTENANCE	2
EVN	ROUTINE SUPPORT, DSS-14/63, 16 HRS	2
GLL	ROUTINE SUPPORT	4 - 5
MAP	ROUTINE AND MANEUVER SUPPORT, 45 MIN - 8 HRS	2 - 3
ULYS	NUTATION SUPPORT, 12 HRS	7

Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #07 - DSS-63

Late July (Week 30) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REQUESTED X-BAND UPLINK DOWNTIME (DOY 204 - 210) (DELETE ROUTINE MAINTENANCE) REDUCE DSS-14, 43 MAINTENANCE BY 2 HRS (DSS, M01O)
DS1	REQUESTED SUPPORT USING DSS-43
EVN	MOVE SUPPORT TO WK 26 (DSS)
GLL	REDUCE 70M SUPPORT TO 10 PASSES/WEEK USING DSS-14, 43 (DSS, M01O)
MAP	MOVE ROUTINE SUPPORT TO DSS-14, 43 MOVE MANEUVER SUPPORT TO WK 29
ULYS	REQUESTED SUPPORT USING FIVE PASSES AT DSS-14 AND TWO PASSES AT DSS-54 (DSS)

Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #08 - DSS-14, 43
Late July - Early September (Weeks 31 - 36)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DS1	ROUTINE SUPPORT, DSS-14, 43, 63/65	1
DSS	BEARING/ROUTINE MAINTENANCE, 6 - 10.5 HRS	3 - 4
GLL	ROUTINE SUPPORT	8 - 14
	ENCOUNTER SUPPORT, WK 31 - 32	4 - 6
M01O	DDOR TEST, DSS-14/34, WK 31, 33, 35, 3 HRS	1
	MARS APPROACH/DDR, DSS-14/43, WK 36, 4 HRS	1
MAP	ROUTINE SUPPORT, 45 MIN	7
ULYS	NUTATION SUPPORT, DSS-14, 12 HRS	7
VGR1	MAGROL SUPPORT, DSS-14, WK 31, DOY 216	1
VGR2	NEGOTIATED SUPPORT, DSS-43, WK 34 - 36, 8 HRS	7
	DTR P/B, DSS-43, WK 36, DOY 248	1

NOTE - DSS-63 DOWN FOR X-BAND UPLINK - WK 30 - WK 41



Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #08 - DSS-14, 43
Late July - Early September (Weeks 31 - 36) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
DS1	REQUESTED SUPPORT USING DSS-14, 43
DSS	SCHEDULE OFF-SHIFT MAINTENANCE IN WK 31 - 32 (GLL)
GLL	REDUCE ROUTINE SUPPORT TO SEVEN 8 HR PASSES IN WK 33 - 36 (DSS, DS1, ULYS)
M01O	REQUESTED SUPPORT
MAP	REQUESTED SUPPORT
ULYS	REQUESTED SUPPORT
VGR1	REQUESTED SUPPORT
VGR2	REQUESTED SUPPORT

Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #09 - DSS-14, 43
Mid-September - Early October (Weeks 37 - 40)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DS1	COMET SUPPORT, DSS-14, 43	2 - 14
DSS	BEARING/ROUTINE MAINTENANCE	3 - 4
GLL	ROUTINE SUPPORT	14
GSSR	MERCURY, DSS-14, WK 37 AND WK 40, 5.5 HRS	1
M01O	TCM SUPPORT, WK 37, 3 HRS	1
	MARS APPROACH/DDR, DSS-14/43, 4 HRS	1
MAP	ROUTINE SUPPORT, 45 MIN	7
RASA	M-WAVE SPECT, DSS-43, 9 HRS	1
ULYS	NUTATION SUPPORT, DSS-14, 12 HRS	7
VGR2	NEGOTIATED SUPPORT, DSS-43, 8 HRS	7
	ASCAL, DSS-43, WK 37, DOY 254	1
	MAGROL SUPPORT, DSS-43, WK 37, DOY 257	1

NOTE - DSS-63 DOWN FOR X-BAND UPLINK - WK 30 - WK 41

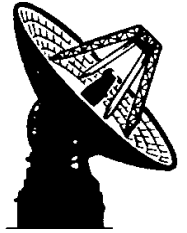


Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #09 - DSS-14, 43

Mid-September - Early October (Weeks 37 - 40) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
DS1	REQUESTED SUPPORT USING DSS-14, 43
DSS	USE OFF-SHIFT MAINTENANCE IN WK 37 - 38 (DS1, GLL)
GLL	REDUCE TO 14 FOUR HR PASSES PER WEEK, WK 37 - 38 (DS1) REDUCE TO TEN PASSES PER WEEK, WK 39 - 40 (DS1, DSS)
GSSR	REQUESTED SUPPORT
M01O	REQUESTED SUPPORT
MAP	REQUESTED SUPPORT
RASA	REQUESTED SUPPORT
ULYS	REQUESTED SUPPORT
VGR2	REQUESTED SUPPORT

Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #10 - 70M
Early October - December (Weeks 41 - 52)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DS1	ROUTINE SUPPORT, DSS-14, 43, 63/65	1
DSN	ANTENNA CALIB, WK 41 - 42, 45 - 47, 49 - 51	1
DSS	BEARING/ROUTINE MAINTENANCE, 6 - 72 HRS	5 - 6
	EXTEND DSS-63 X-BAND UPLINK DOWNTIME, 3 DAYS IN WK 41 (DOY 281 - 283), 24 HRS	3
	HOST COUNTRY, DSS-63, 43, WK 41 AND 42, 24 HRS	1
GLL	ENCOUNTER AND ROUTINE SUPPORT	14 - 17
GRVB	ROUTINE SUPPORT, WK 45, 6.5 - 12 HRS	3
GSSR	MERCURY (WK 43), GODR (WK 46, 48 - 51) 1998WT24 ASTEROID (WK 50 - 51) 5.5 - 10 HRS	1 - 4
M01O	APPROACH/DDR(DSS-14/43), ENC, TCM, MAP, 3-8 HRS	1 - 16
MAP	MANEUVER AND ROUTINE SUPPORT, 45 MIN - 8 HRS	7 - 9
MGS	MARS MAPPING, 9.5 - 10 HRS	7

Note - Users in contention continue next page

Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #10 - 70M

Early October - December (Weeks 41 - 52) (Continued)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
RASA	M-WAVE SPECT, DSS-14, 43, 9 HRS	1 - 2
	PLANET R/AST, DSS-14, WK 41, 43, 45 - 52, 9 HRS	1
	RADIO STARS WCB, DSS-14\63, WK 44 AND 50, 14 HRS	1
	VLBA WCB, DSS-14\63, WK 45 AND 49	1
SOHO	TSO SUPPORT, DSS-14, 63, WK 45	4
SVLB	ROUTINE SUPPORT, WK 41 - 43, 45 - 47, 49 - 51	1
ULYS	NUTATION SUPPORT, DSS-14, 63, 7 - 17 HRS	8 - 14
VGR1	ASCAL, UPLINK, DTR ARRAY (DSS-14/15)	1 - 7
	AND NEGOTIATED SUPPORT, DSS-14, 43, 2 - 8 HRS	1 - 7
VGR2	MAGROL/UPLINK/NEGOTIATED SUPPORT, 2.5 - 8 HRS	5 - 8

Note - Users in contention continued from previous page

Resource Allocation Review
Requirements Analysis and Recommendations
2001 - Contention Period #10 - 70M
Early October - December (Weeks 41 - 52) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
DS1	REQUESTED SUPPORT USING DSS-14, 43
DSN	DELETE SUPPORT IN WK 41, 50 AND 51, MOVE WK 45 AND 47 SUPPORT TO WK 48 AND 52 (DSS, GLL, M01O, ULYS)
DSS	DELETE DSS-63 HOST COUNTRY AND ROUTINE/BEARING MAINT IN WK 41. REDUCE TO ONE 6 - 8 HR SUPPORT AT EACH ANT IN WK 43 AND TO 2 DSS-14 SUPPORTS IN WK 51 (GLL, GSSR, M01O, ULYS)
GLL	REQUESTED ENCOUNTER SUPPORT IN WK 41 - 42 REDUCE ROUTINE SUPPORT TO 4 / 5 EIGHT HR AND FOUR 4 HR SUPPORTS IN WK 41 - 42 REDUCE ROUTINE SUPPORT TO SEVEN 8 HR AND FOUR 4 HR, WK 43 REDUCE ROUTINE SUPPORT TO TEN 8 HR SUPPORTS, WK 44 - 49 REDUCE ROUTINE SUPPORT TO 7 - 8 HR AND FOUR 4 HR, WK 50 - 52 (DSS, GSSR, M01O, ULYS)
GVRB	MOVE TO WK 49 (GLL, MGS, ULYS)

Note - User Recommendations continue next page

Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #10 - 70M

Early October - December (Weeks 41 - 52) (Continued)



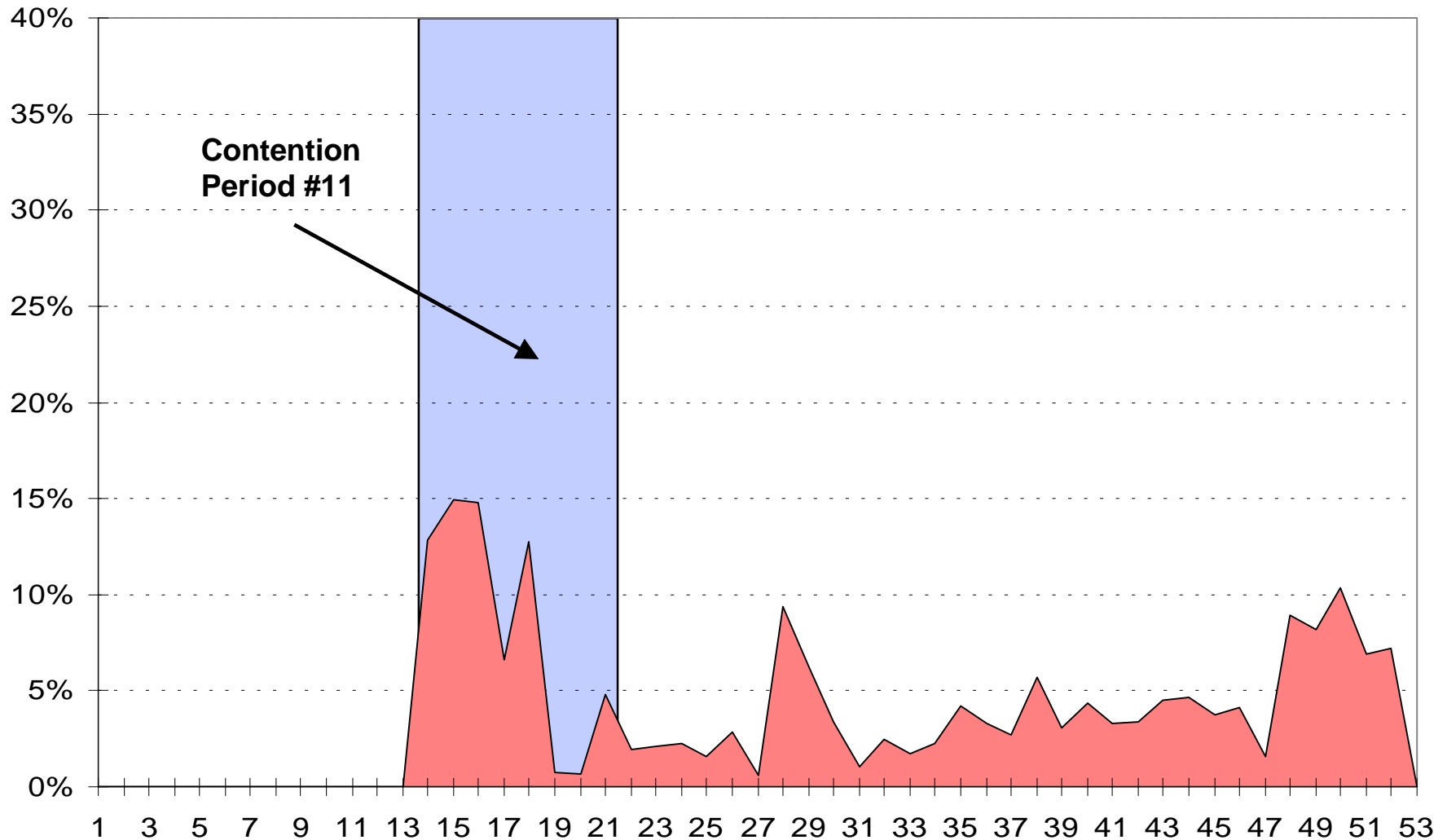
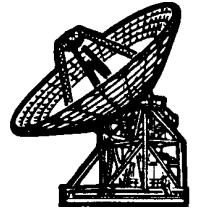
<u>USER</u>	<u>RECOMMENDATION</u>
GSSR	DELETE GODR IN WK 46, 50 AND 51 (1998WT24, M01O, MGS, ULYS)
M01O	REDUCE ENCOUNTER SUPPORT TO 7 PASSES IN WK 43 (DSS, GLL, GSSR, MAP, ULYS, VGR1)
MAP	MOVE 3 PASSES IN WK 41 TO DSS-14, 43 (DSS)
MGS	REQUESTED SUPPORT
RASA	DELETE RADIO STARS WCB AND VLBA WCB SUPPORTS (GLL, GSSR, M01O, MGS, ULYS)
SOHO	REQUESTED SUPPORT
SVLB	REQUESTED SUPPORT
ULYS	MOVE 7 PASSES/WK IN WK 41 - 44 TO DSS-24, 54 (DSS, M01O, VGR1)
VGR1	MOVE WK 47 NEGOTIATED SUPPORT TO DSS-15, 65 (DSS, MGS, VGR2)
VGR2	MOVE NEGOTIATED SUPPORT IN WK 43 - 45 TO DSS-45 (M01O, MGS)

Note - User Recommendations continued from previous page

Resource Allocation Review

Requirements Analysis and Recommendations

2001 Weekly Contention Percent - 34HEF





Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #11 - 34HEF
Early April - Late May (Weeks 14 - 21)



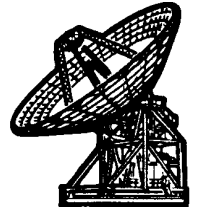
<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CAS	GRAVITATIONAL WAVE, DSS-45, 65, WK 18, 8 - 9 HRS	9 - 10
DS1	ROUTINE SUPPORT	1 - 2
DSN	CAT M&E AND CLOCK SYNC SUPPORT, DSS-15\45, 15\65, WK 14 AND 16, 4 - 24 HRS	1 - 2
DSS	HOST COUNTRY, DSS-45, WK 19, ROUTINE MAINTENANCE, 6 - 12 HRS	3 - 4
GODR	ROUTINE SUPPORT, DSS-14/15, WK 15	1
M01O	LAUNCH/CRUISE, DSS-45, WK 14 - 16, 15 - 16 HRS	1 - 4
MGS	MARS MAPPING, 12 HRS	9 - 10
SGP	CRUSTAL DYNAMICS, WK 15, 17 AND 21, 24 HRS	1 - 2
SDU	ROUTINE SUPPORT, 6 HRS	1
VGR1	DTR ARRAY, DSS-14/15, WK 17 AND NEGOTIATED SUPPORT, DSS-65, WK 14 - 18, 4 - 7.4 HRS	4 - 8
VGR2	NEGOTIATED SUPPORT, DSS-45, WK 14 - 18 AND 21, 6-8 HRS	3 - 7



Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #11 - 34HEF
Early April - Late May (Weeks 14 - 21) (Continued)

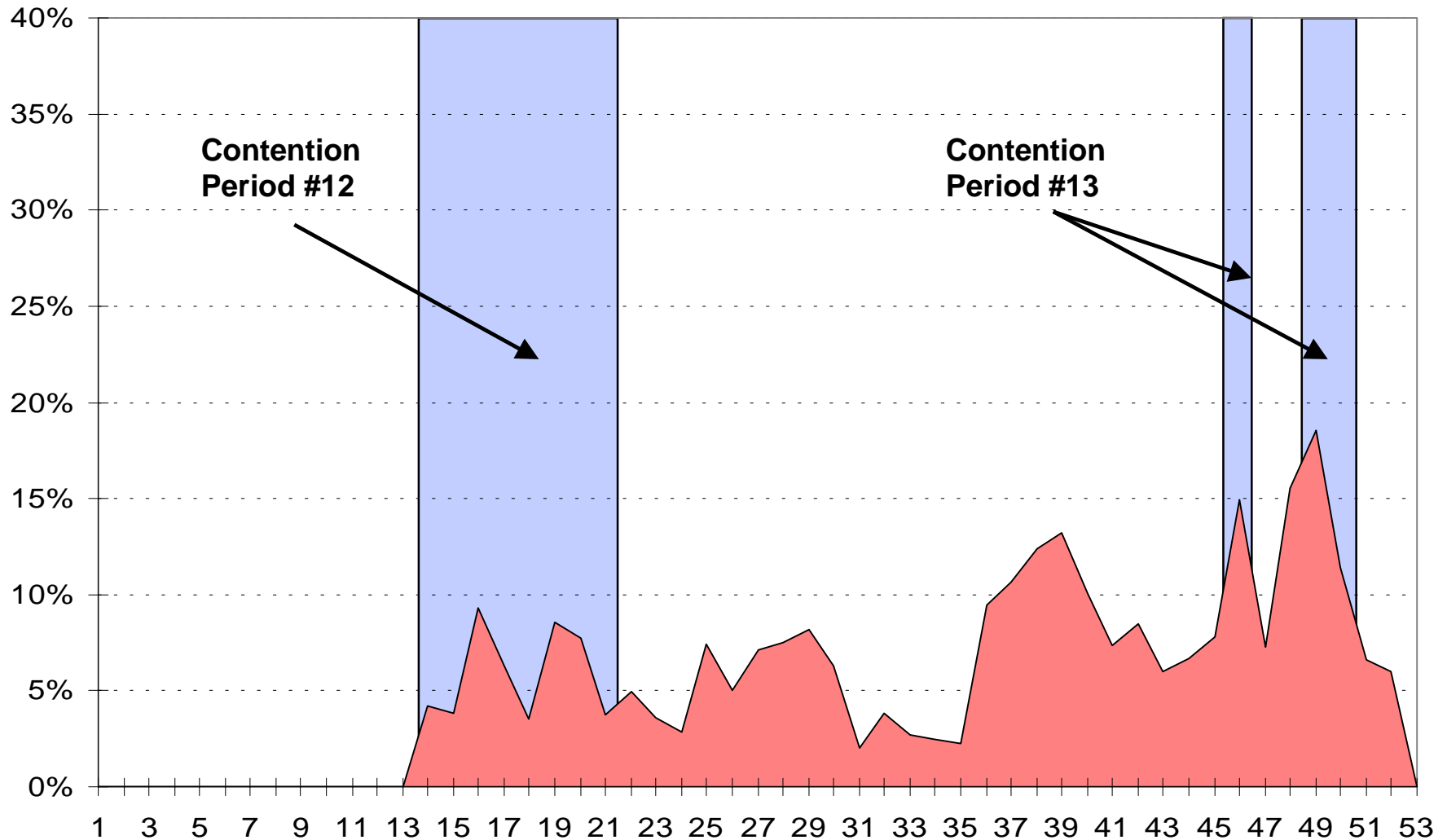
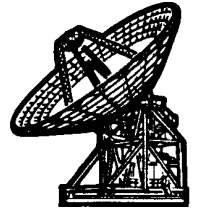


<u>USER</u>	<u>RECOMMENDATION</u>
CAS	REQUESTED SUPPORT
DS1	REQUESTED SUPPORT
DSN	REQUESTED SUPPORT
DSS	REQUESTED SUPPORT
GODR	REQUESTED SUPPORT
M01O	REQUESTED SUPPORT
MGS	REQUESTED SUPPORT USING 8 HR SUPPORTS AT DSS-15, 65 AND 4 HR SUPPORTS AT DSS-24
SGP	REQUESTED SUPPORT
SDU	REQUESTED SUPPORT
VGR1	REDUCE TO 3 PASSES/WK IN WK 14, 15 AND 17 (MGS)
VGR2	REDUCE SUPPORT TO 5 HRS AND MOVE TO DSS-34 (M01O, MGS)

Resource Allocation Review

Requirements Analysis and Recommendations

2001 Weekly Contention Percent - 34BWG1

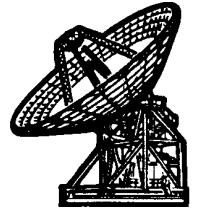




Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #12 - 34BWG1
Early April - Late May (Weeks 14 - 21)



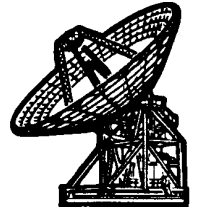
<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CHDR	ROUTINE SUPPORT	21
CLU2	INTERFEROMETRY, DSS-16/24, 46/34, WK 16, 20, 1HR	1
DSS	ROUTINE SUPPORT, 4 - 8 HRS	3
GNS	LAUNCH AND ROUTINE SUPPORT, 4 - 8 HRS	3 - 11
GSSR	VENUS, DSS-14/24, WK 15 - 17 AND 19, 2.5 HRS	1 - 2
IMAG	ROUTINE SUPPORT, DSS-24, 54, 0.8 - 1.5 HRS	14
M01O	LAUNCH, DSS-34, WK 15 AND 16, 15 HRS	1 - 4
MAP	LAUNCH, WK 16 - 20, 4 - 12 HRS	7 - 8
PLNB	ROUTINE SUPPORT, DSS-34, 54, WK 17 AND 21	1
ULYS	NUTATION SUPPORT, DSS-24, 34, 5 - 8 HRS	1 - 6
VGR1	NEGOTIATED SUPPORT, DSS-54, WK 18 - 21	3 - 7
VGR2	NEGOTIATED SUPPORT, WK 19 - 21, 8 HRS	4 - 7
WIND	ROUTINE SUPPORT, 2.5 HRS	7



Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #12 - 34BWG1
Early April - Late May (Weeks 14 - 21) (Continued)



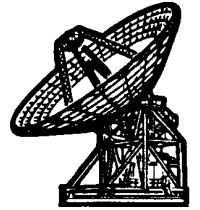
<u>USER</u>	<u>RECOMMENDATION</u>
CHDR	REQUESTED SUPPORT
CLU2	REQUESTED SUPPORT
DSS	REDUCE DSS-24 AND 54 MAINTENANCE IN WK 14 - 16, 18, AND 21 TO 4 HRS (GNS, IMAG, PLNB, ULYS)
GNS	REQUESTED SUPPORT
GSSR	REQUESTED SUPPORT
IMAG	REQUESTED SUPPORT
M01O	REQUESTED SUPPORT USING DSS-45 (ULYS, VGR2)
MAP	REQUESTED SUPPORT
PLNB	REQUESTED SUPPORT
ULYS	REQUESTED SUPPORT
VGR1	REQUESTED SUPPORT
VGR2	REDUCE SUPPORT TO 5 HRS (GNS, ULYS)
WIND	REQUESTED SUPPORT



Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #13 - DSS-34, 54
November - Mid-December (Weeks 46, 49-50)



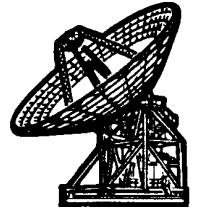
<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CHDR	ROUTINE SUPPORT, 1 HR	14
DSS	MAINTENANCE, 6 HRS	2
GNS	ROUTINE SUPPORT, 4 - 8 HRS	3 - 12
IMAG	ROUTINE SUPPORT, 0.8 - 1.5 HRS	6 - 7
M01O	AEROBRAKING	14
PLNB	ROUTINE SUPPORT, DSS-54, WK 49	0 - 1
SRTF	LAUNCH SUPPORT, WK 49 AND 50	14
WIND	ROUTINE SUPPORT, 2.5 HRS	3 - 4



Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #13 - DSS-34, 54
November - Mid-December (Weeks 46, 49-50) (Continued)

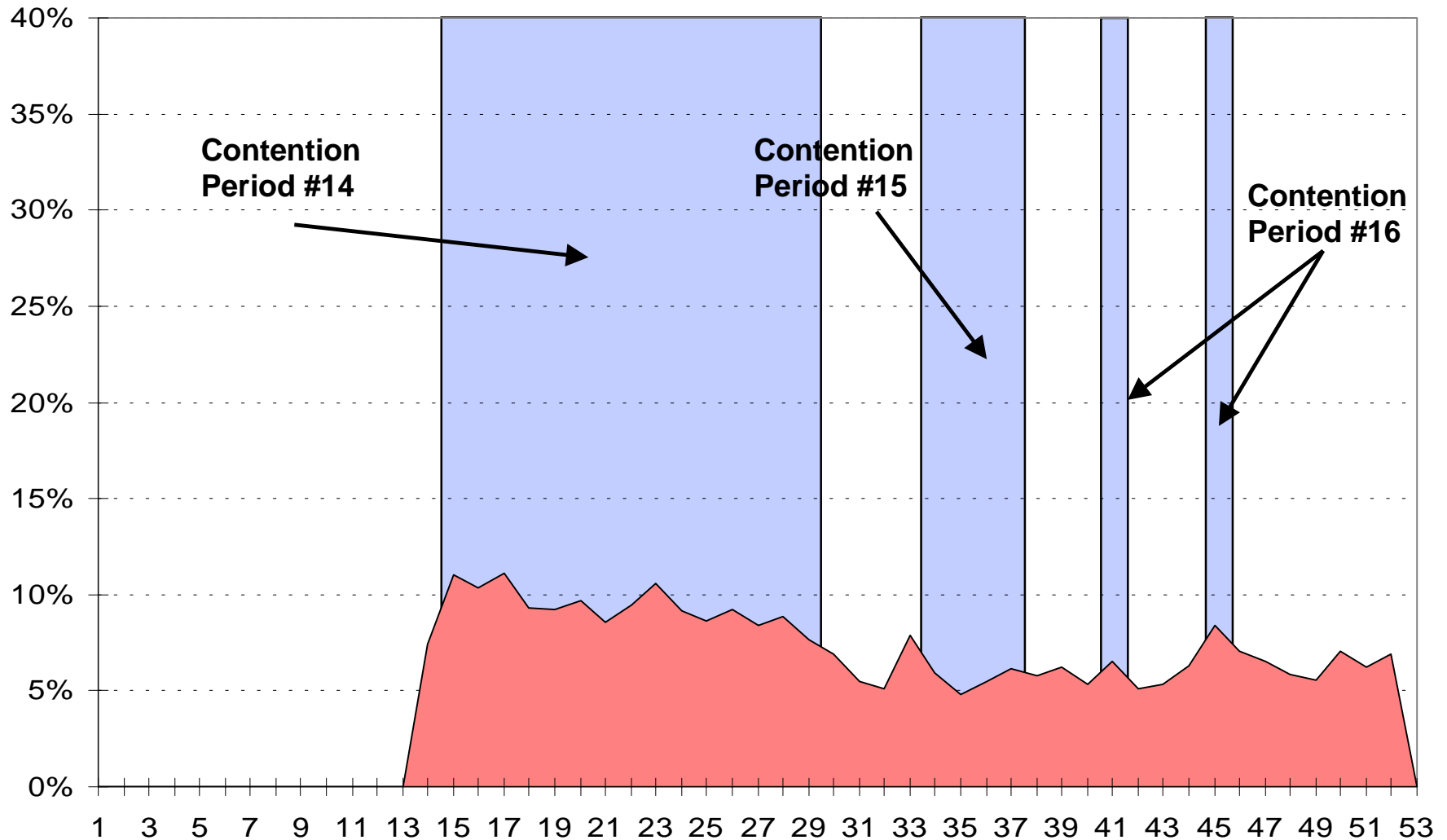


<u>USER</u>	<u>RECOMMENDATION</u>
CHDR	REQUESTED SUPPORT
DSS	REDUCE SUPPORT IN WK 46 TO 4 HRS AT EACH ANTENNA (GNS, M01O)
GNS	REQUESTED SUPPORT
IMAG	REQUESTED SUPPORT
M01O	MSPA WITH MGS AT DSS-45 AND 65 SIX PASSES/WK (DSS, GNS, SRTF)
PLNB	MOVE SUPPORT TO WK 51 (DSS, GNS, M01O)
SRTF	REQUESTED SUPPORT
WIND	REQUESTED SUPPORT

Resource Allocation Review

Requirements Analysis and Recommendations

2001 Weekly Contention Percent - 26M



Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #14 - 26M
Mid-April to Late July (Weeks 15 - 29)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
ACE	ROUTINE SUPPORT, 3.5 HRS	5 - 7
DSS	MAINTENANCE, 6 - 8 HRS	3
SOHO	TSO, HSO AND ROUTINE SUPPORT, 1.6 - 8 HRS	14 - 23

<u>USER</u>	<u>RECOMMENDATIONS</u>
ACE	REQUESTED SUPPORT
DSS	REDUCE DSS-46 MAINTENANCE TO 4 HRS AND REDUCE 8 HR SUPPORTS AT DSS-16 AND 66 TO 6 HRS
SOHO	SPLIT ROUTINE SUPPORT IN WK 29, USING TWO 4-HR PASSES AT DSS-16, 66 AND TWO AT DSS-27 (ACE, DSS)



Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #15 - DSS-16
Mid-August - Mid-September (Weeks 34 - 37)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u> (DOY 232 - 258)
DSS	SERVO HYDRAULIC DRIVE REPLACEMENT	
ACE	ROUTINE SUPPORT, WK 34, 10 HRS	2
	ROUTINE SUPPORT, 3.5 HRS	2 - 4
CLU2	ROUTINE SUPPORT, 2 HRS	6
	ROUTINE SUPPORT, DSS-16/24, WK 36, 1 HR	0 - 1
DSS	MAINTENANCE	1
GEOT	ROUTINE SUPPORT, 1.1 HRS	7
POLR	POLR PB, 1 HR	6 - 10
	POLR RT, 2 HRS	2 - 3
SOHO	ROUTINE SUPPORT, 1.6 HRS	1 - 5
	SOHO TSO, WK 37, 6- 8 HRS	4 - 5



Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #15 - DSS-16

Mid-August - Mid-September (Weeks 34 - 37) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REQUESTED DOWNTIME (DELETE ROUTINE MAINTENANCE)
ACE	MOVE MONTHLY SUPPORT TO WK 32 MOVE ROUTINE SUPPORT TO DSS-27 (AND SCHEDULE 2 TO 4 ONE HR RANGE SUPPORTS AT DSS-46, 66)
CLU2	MOVE SUPPORT TO DSS-24
GEOT	SCHEDULE SUPPORT AT DSS-15
POLR	SCHEDULE PB SUPPORT AT DSS-24, 27 SCHEDULE RT SUPPORT AT DSS-24, 27
SOHO	SCHEDULE ROUTINE SUPPORT AT DSS-27 SCHEDULE TSO AT DSS-24



Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #16 - 26M
October - November (Weeks 41, 45)



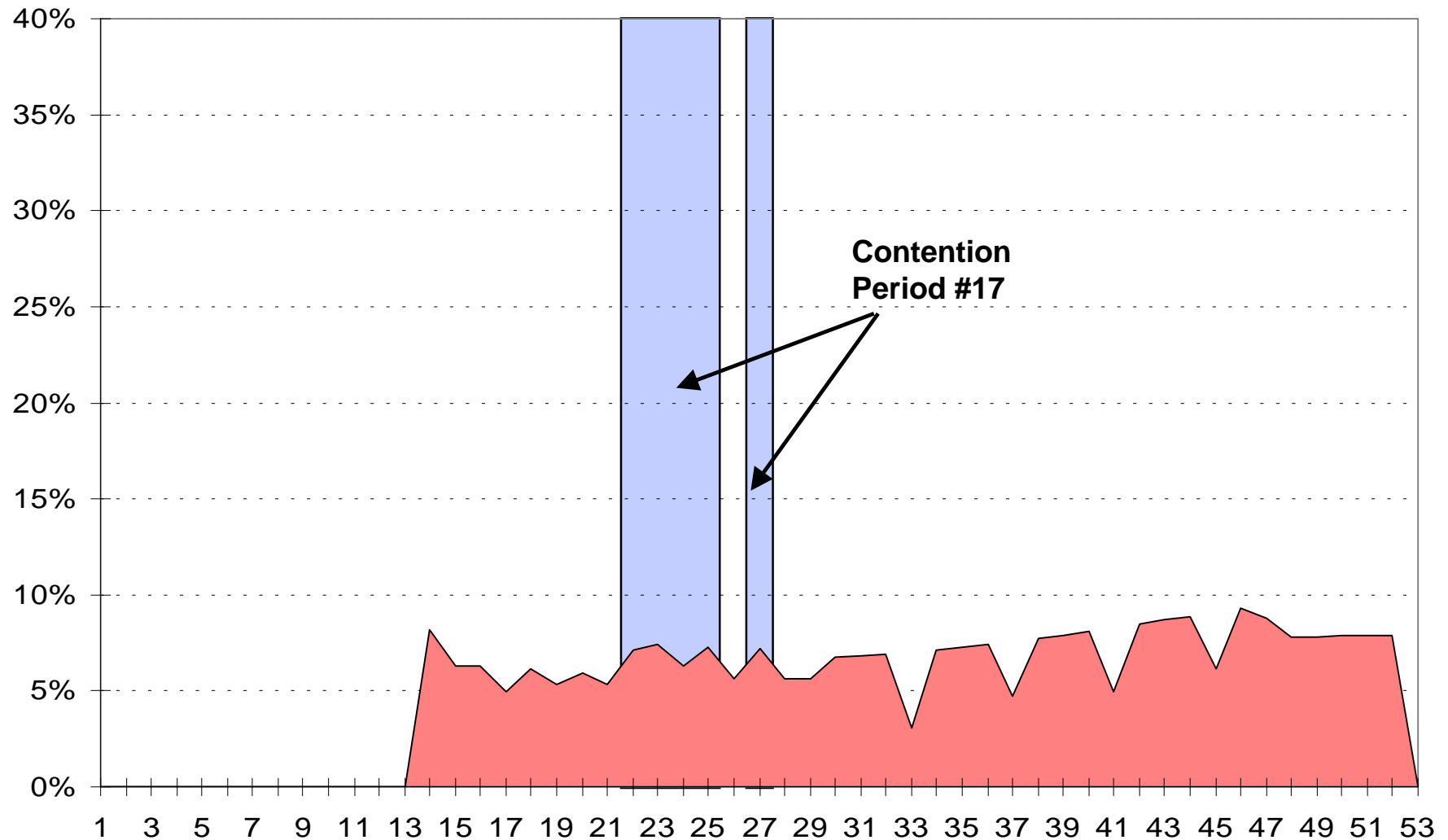
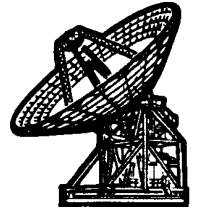
<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
ACE	ROUTINE SUPPORT, 3.5 HRS	5 - 7
DSS	MAINTENANCE, 6 - 8 HRS	3
SOHO	TSO AND ROUTINE SUPPORT, 1.6 - 8 HRS	17 - 23

<u>USER</u>	<u>RECOMMENDATIONS</u>
ACE	REQUESTED SUPPORT
DSS	REDUCE DSS-46 MAINTENANCE TO 4 HRS IN WK 41 REDUCE DSS-16 AND 66 TO 6 HRS IN WK 45 (ACE, SOHO)
SOHO	SPLIT ROUTINE SUPPORT IN WK 41 USING TWO 4-HR PASSES AT DSS-16, 66 AND TWO 4-HR PASSES AT DSS-27 (ACE, DSS)

Resource Allocation Review

Requirements Analysis and Recommendations

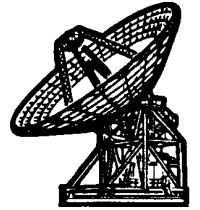
2001 Weekly Contention Percent - 34HSB



Resource Allocation Review

Requirements Analysis and Recommendations

2001 - Contention Period #17 - DSS-27
Late May - Early July (Weeks 22 - 25, 27)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	MAINTENANCE	1
SOHO	HSO SUPPORT	7

<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REDUCE MAINTENANCE TO 6 HRS (SOHO)
SOHO	REQUESTED SUPPORT



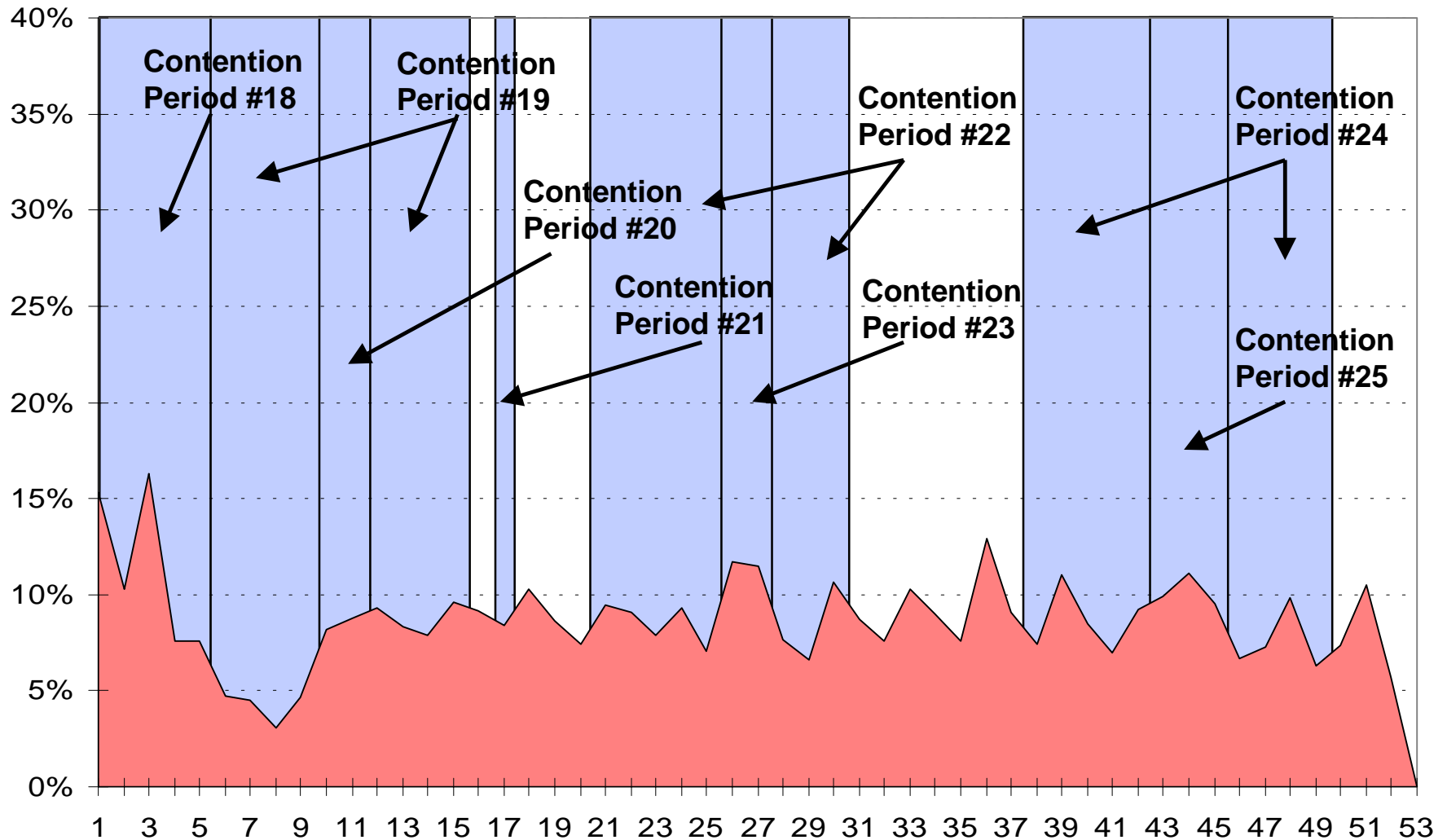
Resource Allocation Review Requirements Analysis and Recommendations

2002 Activities in Contention / Recommendations

Resource Allocation Review

Requirements Analysis and Recommendations

2002 Weekly Contention Percent - 70M





Resource Allocation Review

Requirements Analysis and Recommendations

2002 - Contention Period #18 - 70M
January - Early February (Weeks 01 - 05)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	BEARING/ROUTINE MAINTENANCE	5 - 6
EVN	ROUTINE SUPPORT, DSS-14/63, WK 01, 16 HRS	2
GLL	ROUTINE SUPPORT, WK 01 - 04	4 - 14
	ENCOUNTER SUPPORT, WK 03	15
GSSR	ASTEROID NEREUS, DSS-14, WK 03 - 05	1 - 6
M01O	MARS MAPPING SUPPORT	14
MAP	ROUTINE SUPPORT, 45 MIN	7
	MANEUVER SUPPORT, WK 04, 8 HRS	3
RASA	M-WAVE SPECT, DSS-14, 43, 9 HRS	2
	PLANET R/AST, DSS-14, 9 HRS	1
	RA500 WCB, DSS-14/63, WK 02, 24 HRS	1
	VLBA WCB, DSS-14/63, WK 01, 8 HRS	1
ULYS	ROUTINE SUPPORT, DSS-63, WK 01, 10 HRS	3 - 4
VGR1	MAGROL SUPPORT, DSS-14, WK 05	1



Resource Allocation Review

Requirements Analysis and Recommendations

2002 - Contention Period #18 - 70M
January - Early February (Weeks 01 - 05) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REQUESTED SUPPORT
EVN	MOVE SUPPORT TO WK 06 (GLL)
GLL	REDUCE ROUTINE SUPPORT BY 3 PASSES, WK 01 - 03 (M01O)
GSSR	REQUESTED SUPPORT
M01O	REQUESTED SUPPORT
MAP	MOVE MANEUVER TO WK 05 (GLL, M01O)
RASA	MOVE RA500 WCB TO WK 05 (GSSR, M01O)
ULYS	REQUESTED SUPPORT
VGR1	REQUESTED SUPPORT

Resource Allocation Review

Requirements Analysis and Recommendations

2002 - Contention Period #19 - DSS-14
Early February - Mid-April (Weeks 06 - 15)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u> (DOY 035 - 104)
DSS	UPGRADE 70M SERVO DRIVE DOWNTIME	
EVN	CALIB SUPPORT, WK 11, 3 HRS	1
GRVB	ROUTINE SUPPORT, DSS-14, WK 11, 12 HRS	1
GODR	ROUTINE SUPPORT, DSS-14/15, WK 12 AND 14	1
M01O	MARS MAPPING, DSS-14, 43, 7 HRS	7
MAP	ROUTINE SUPPORT, WK 06 - 09, 45 MIN	2 - 3
RASA	M-WAVE SPECT, WK 10 - 15, 9 HRS	1
	PLANET R/AST, WK 10 - 15, 9 HRS	1
	RA500 WCB, DSS-14\63, WK 14, 24 HRS	1
	RADIO STARS, DSS-14\63, WK 13, 14 HRS	1
	VLBA WCB, DSS-14\63, WK 14, 8 HRS	1
SVLB	ROUTINE SUPPORT	0 - 1
VGR1	MAGROL SUPPORT, WK 11, 7 HRS	1
	ROUTINE UPLINK, 2.5 HRS	0 - 1



Resource Allocation Review

Requirements Analysis and Recommendations

2002 - Contention Period #19 - DSS-14
Early February - Mid-April (Weeks 06 - 15) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REQUESTED DOWNTIME (DELETE BEARING/ROUTINE MAINT)
EVN	MOVE SUPPORT TO WK 17
GRVB	MOVE SUPPORT TO WK 16
GODR	DELETE SUPPORT
M01O	REQUESTED SUPPORT USING DSS-43, 63 (DSS)
MAP	MOVE SUPPORT TO DSS-43, 63
RASA	DELETE SUPPORT
SVLB	MOVE SUPPORT TO DSS-43, 63
VGR1	MOVE MAGROL TO DSS-15 MOVE UPLINK SUPPORT TO DSS-43, 63

Resource Allocation Review

Requirements Analysis and Recommendations

2002 - Contention Period #20 - DSS-43
Early - Mid-March (Weeks 10 - 11)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	BEARING/ROUTINE MAINTENANCE	1
M01O	MARS MAPPING SUPPORT, 7 HRS	7
VGR2	NEGOTIATED SUPPORT	3 - 4
	ASCAL, WK 10, 2 HRS	1
	DTR P/B, WK 11, 7.4 HRS	1

<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REQUESTED SUPPORT
M01O	REQUESTED SUPPORT
VGR2	REQUESTED SUPPORT

NOTE DSS-14 IS DOWN FOR 70M SERVO DRIVE UPGRADE WK 06 - WK 15

Resource Allocation Review

Requirements Analysis and Recommendations

2002 - Contention Period #21 - DSS-14
Late April (Week 17)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	ROUTINE MAINTENANCE	2
GSSR	ASTEROID 1999GU3 SUPPORT, DOY 112 - 115	4
M01O	MARS MAPPING SUPPORT	4 - 5
VGR1	DTR ARRAY, DSS-14/15, DOY 115	1

<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REQUESTED SUPPORT
GSSR	DELETE SUPPORT ON DOY 115 FOR VGR1 DTR ARRAY ADD ONE EXTRA SUPPORT IN WK 16, DOY 110
M01O	REQUESTED SUPPORT USING DSS-43, 63
VGR1	REQUESTED SUPPORT



Resource Allocation Review

Requirements Analysis and Recommendations

2002 - Contention Period #22 - DSS-63
Late May - Late July (Weeks 21 - 30)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u> (DOY 141 - 210)
DSS	UPGRADE 70M SERVO DRIVE DOWNTIME	
EVN	ROUTINE SUPPORT, DSS-14/63, WK 22 AND 30, 3 - 16 HRS	1
GRVB	ROUTINE SUPPORT, WK 29	1
M01O	MARS MAPPING SUPPORT	4 - 5
MAP	ROUTINE SUPPORT, 45 MIN	2 - 3
	MANEUVER SUPPORT, WK 30	1
RASA	RA500 WCB, WK 27, 24 HRS	1
	RADIO STARS, WK 20 AND 26, 14 HRS	1
	VLBA WCB, WK 23 AND 27	1
SVLB	ROUTINE SUPPORT	0 - 1
VGR1	ROUTINE UPLINK, 2.5 HRS	0 - 1



Resource Allocation Review

Requirements Analysis and Recommendations

2002 - Contention Period #22 - DSS-63
Late May - Late July (Weeks 21 - 30) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REQUESTED DOWNTIME (DELETE BEARING/ROUTINE MAINT)
EVN	MOVE CALIB TO WK 31 AND ROUTINE SUPPORT TO WK 34
GRVB	MOVE SUPPORT TO WK 31
M01O	REQUESTED SUPPORT USING DSS-14, 43
MAP	REQUESTED ROUTINE SUPPORT AT DSS-14, 43 MOVE MANEUVER TO WK 31
RASA	DELETE SUPPORT
SVLB	REQUESTED ROUTINE SUPPORT AT DSS-14, 43
VGR1	MOVE SUPPORT TO DSS-14

Resource Allocation Review

Requirements Analysis and Recommendations

2002 - Contention Period #23 - DSS-14
Late June - Early July (Weeks 26 - 27)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	BEARING/ROUTINE MAINTENANCE	2 - 3
GSSR	ASTEROID 1992FE SUPPORT, DOY 179 - 182, 6 HRS	1 - 3
M01O	MARS MAPPING SUPPORT	4 - 5

<u>USER</u>	<u>RECOMMENDATION</u>
DSS	DELETE BEARING MAINTENANCE (GSSR)
GSSR	REQUESTED SUPPORT
M01O	REQUESTED SUPPORT USING DSS-14, 43

NOTE - DSS-63 IS DOWN FOR SERVO DRIVE UPGRADE WK 21 - WK 30



Resource Allocation Review

Requirements Analysis and Recommendations

2002 - Contention Period #24 - DSS-43
Mid-September - Early December (Weeks 38 - 49)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u> (DOY 259 - 342)
DSS	UPGRADE 70M SERVO DRIVE DOWNTIME	
GRVB	ROUTINE SUPPORT, WK 45	1
M01O	MARS MAPPING SUPPORT	4 - 5
MAP	ROUTINE SUPPORT, WK 06 - 09, 45 MIN	2 - 3
	MANEUVER SUPPORT, WK 43	1
PLNB	ROUTINE SUPPORT, WK 42 AND 46	0 - 1
RASA	M-WAVE SPECT, WK 43 - 49, 9 HRS	1
SVLB	ROUTINE SUPPORT	0 - 1
VGR1	ROUTINE UPLINK	0 - 1
VGR2	MAGROL SUPPORT, WK 43, 7 HRS	1
	ROUTINE UPLINK, 2.5 HRS	1



Resource Allocation Review Requirements Analysis and Recommendations

2002 - Contention Period #24 - DSS-43

Mid-September - Early December (Weeks 38 - 49) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REQUESTED DOWNTIME (DELETE BEARING/ROUTINE MAINT)
GRVB	MOVE SUPPORT TO WK 37
M01O	REQUESTED SUPPORT USING DSS-14, 63
MAP	REQUESTED SUPPORT USING DSS-14, 63
PLNB	MOVE SUPPORT TO DSS-34
RASA	DELETE SUPPORT
SVLB	MOVE SUPPORT TO DSS-14, 63
VGR1	MOVE SUPPORT TO DSS-14, 63
VGR2	MOVE MAGROL SUPPORT TO DSS-45
	DELETE ROUTINE UPLINK SUPPORT
	ADD ROUTINE BLF USING DSS-34, 4 - 6 HRS, ONE/WEEK



Resource Allocation Review

Requirements Analysis and Recommendations

2002 - Contention Period #25 - DSS-14
Late October - Early November (Weeks 43 - 45)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	BEARING/ROUTINE MAINTENANCE	2 - 3
GSSR	ASTEROID 1997XF11	3 - 6
M01O	MARS MAPPING SUPPORT	4 - 5
MAP	ROUTINE SUPPORT, 45 MIN	2 - 3
	MANEUVER SUPPORT	1
ULYS	ROUTINE SUPPORT, WK 43, 4 HRS	3
VGR1	DTR ARRAY, DSS-14/15, WK 43, 7.4 HRS	1
	MAGROL, WK 44, 7 HRS	1



Resource Allocation Review Requirements Analysis and Recommendations

2002 - Contention Period #25 - DSS-14

Late October - Early November (Weeks 43 - 45) (Continued)



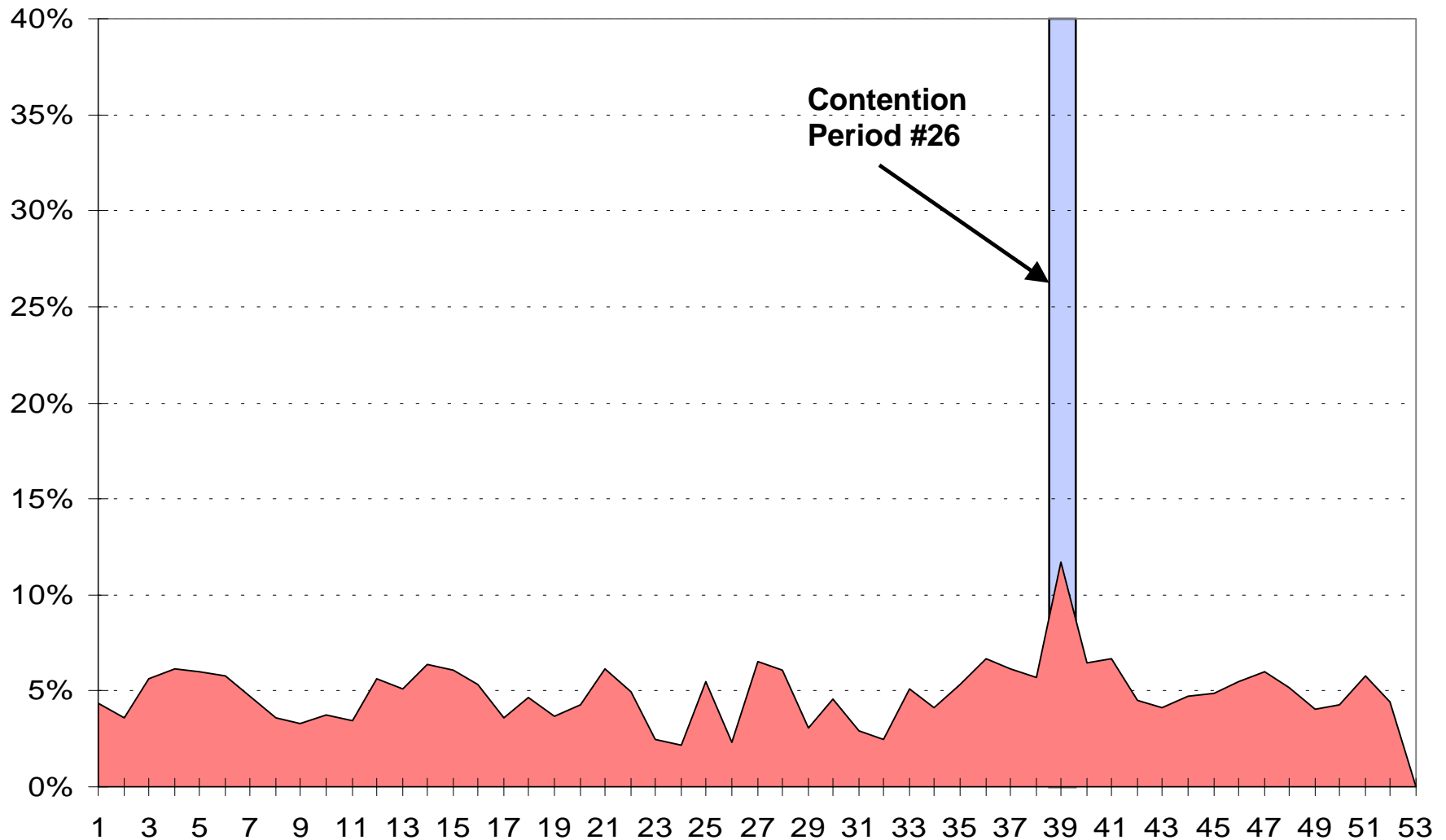
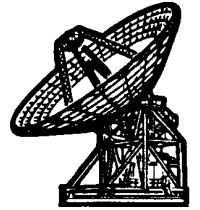
<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REDUCE TWO ROUTINE MAINTENANCE TO 6 HRS IN WK 44 (GSSR)
GSSR	REQUESTED SUPPORT
M01O	REQUESTED SUPPORT USING DSS-14, 63
MAP	REQUESTED SUPPORT
ULYS	REQUESTED SUPPORT
VGR1	REQUESTED SUPPORT

NOTE - DSS-43 IS DOWN FOR 70M SERVO DRIVE UPGRADE WK 38 - WK 49

Resource Allocation Review

Requirements Analysis and Recommendations

2002 Weekly Contention Percent - 34BWG1

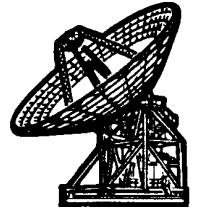




Resource Allocation Review

Requirements Analysis and Recommendations

2002 - Contention Period #26 - DSS-24, 54
Late September (Week 39)



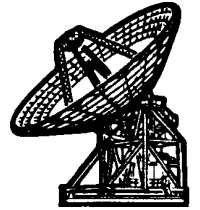
<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
ACE	ROUTINE SUPPORT, 3.5 HRS	3 - 4
CHDR	ROUTINE SUPPORT, 1 HR	14
DSS	MAINTENANCE, 6 - 8 HRS	2
GNS	ROUTINE SUPPORT, 4 - 8 HRS	12
PLNB	ROUTINE SUPPORT	5
SOHO	ROUTINE SUPPORT, DSS-24, 4 HRS	7
SRTF	ROUTINE SUPPORT, DSS-54, 1 HR	2 - 3
ULYS	ROUTINE SUPPORT, DSS-54	4
VGR1	NEGOTIATED SUPPORT, 4 HRS	3
WIND	ROUTINE SUPPORT, 2.5 HRS	4 - 5



Resource Allocation Review

Requirements Analysis and Recommendations

2002 - Contention Period #26 - DSS-24, 54
Late September (Week 39) (Continued)

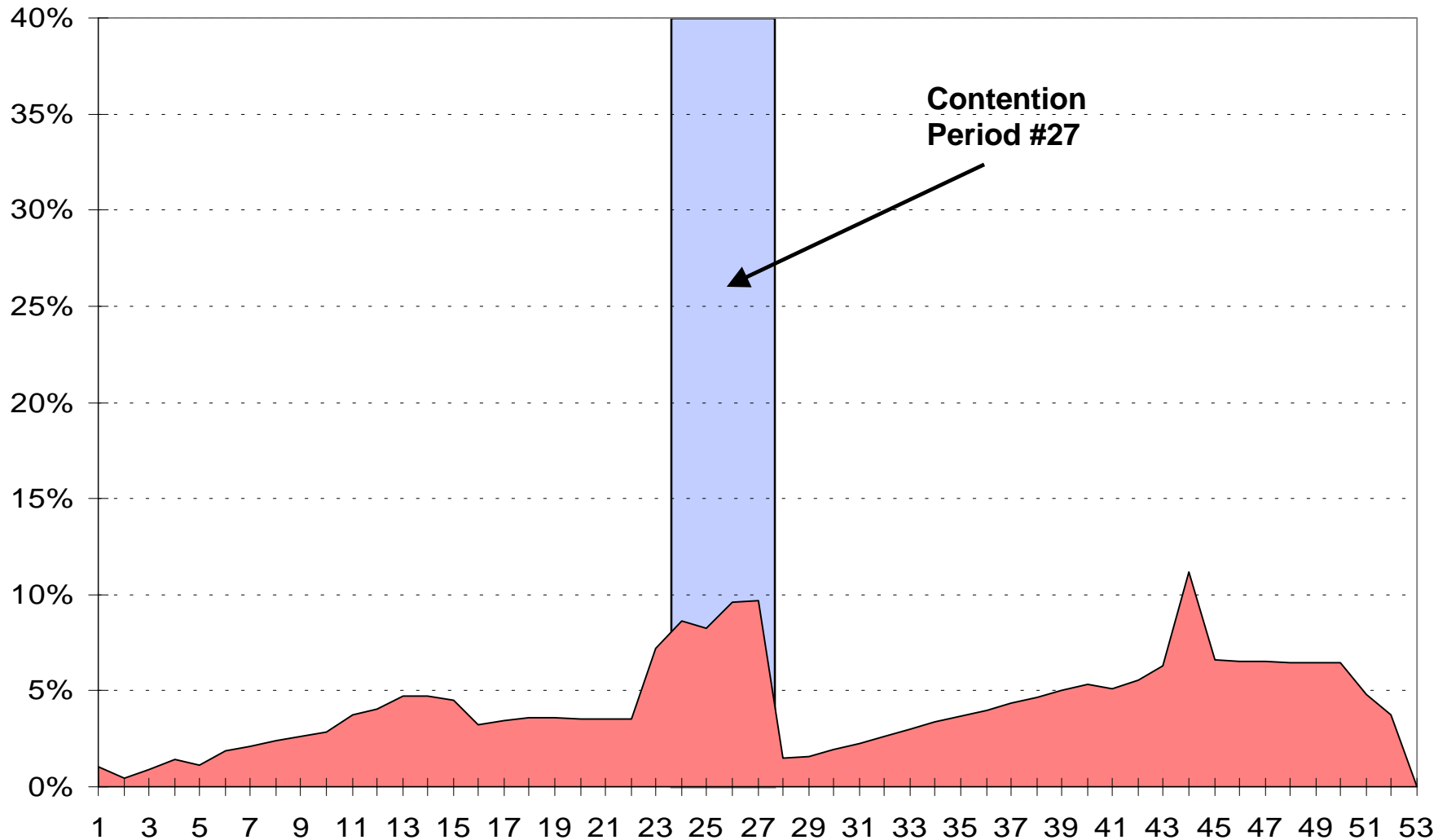
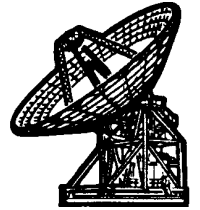


<u>USER</u>	<u>RECOMMENDATION</u>
ACE	REQUESTED SUPPORT
CHDR	REQUESTED SUPPORT
DSS	REDUCE SUPPORT AT EACH ANTENNA TO 4 HRS (ACE, GNS, SOHO, ULYS, WIND)
GNS	REQUESTED SUPPORT
PLNB	REQUESTED SUPPORT
SOHO	REQUESTED SUPPORT
SRTF	REQUESTED SUPPORT
ULYS	REQUESTED SUPPORT
VGR1	REQUESTED SUPPORT
WIND	REQUESTED SUPPORT

Resource Allocation Review

Requirements Analysis and Recommendations

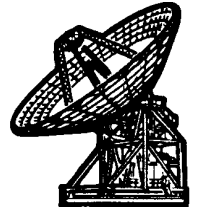
2002 Weekly Contention Percent - 34BWG2



Resource Allocation Review

Requirements Analysis and Recommendations

2002 - Contention Period #27 - 34BWG2
Mid-June - Early July (Weeks 24 - 27)



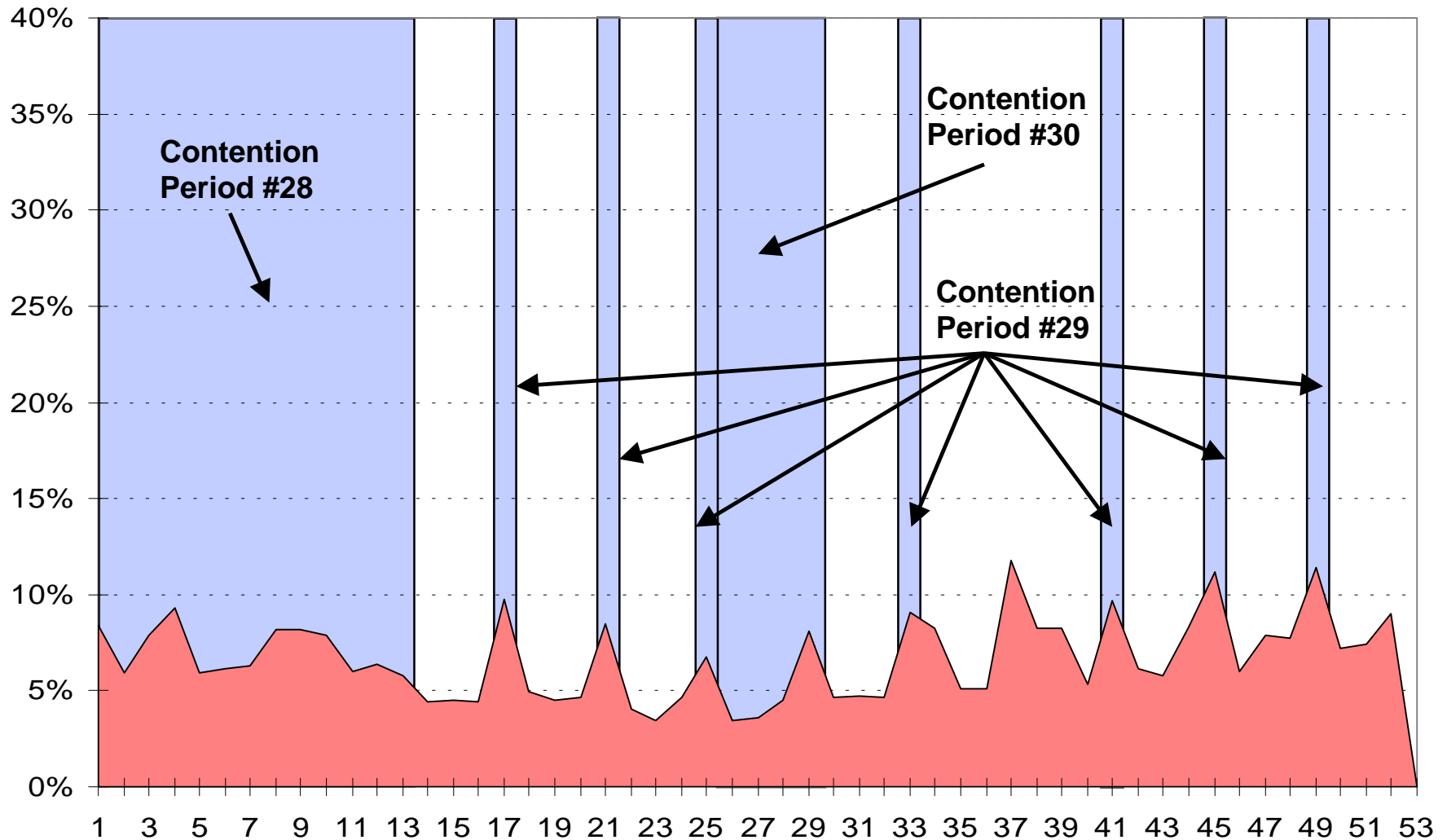
<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CAS	CONJUNCTION	5 - 7
DSS	NEGOTIATED MAINTENANCE, 6 HRS	1
MUSC	ROUTINE SUPPORT, WK 27	2
SRTF	ROUTINE SUPPORT, 1 HR	2 - 3
VGR1	NEGOTIATED SUPPORT, 8 HRS	7

<u>USER</u>	<u>RECOMMENDATIONS</u>
CAS	REQUESTED SUPPORT
DSS	REDUCE SUPPORT TO 4 HRS (CAS, MUSC, SRTF)
MUSC	REQUESTED SUPPORT
SRTF	REQUESTED SUPPORT
VGR1	REDUCE 3 PASSES IN WK 27 TO 6 HRS (SRTF)

Resource Allocation Review

Requirements Analysis and Recommendations

2002 Weekly Contention Percent - 26M



Resource Allocation Review

Requirements Analysis and Recommendations

2002 - Contention Period #28 - 26M
January - March (Weeks 01 - 13)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
ACE	ROUTINE SUPPORT, DSS-16, 66, 3.5 HRS	7
CHDR	ROUTINE SUPPORT, WK 1, 2 HRS	10
CLU2	ROUTINE SUPPORT, DSS-16, 46, 2 HRS	12 - 13
DSS	MAINTENANCE, 6 - 8 HRS	3
GEOT	ROUTINE SUPPORT, 1.1 HRS	21
POLR	ROUTINE SUPPORT, 1 - 2 HRS	35
SOHO	HSO SUPPORT, DSS-46, 66	12 - 14

<u>USER</u>	<u>RECOMMENDATIONS</u>
ACE	REQUESTED SUPPORT
CHDR	REQUESTED SUPPORT
CLU2	REQUESTED SUPPORT
DSS	REDUCE SUPPORT BY 2 HRS AT EACH ANTENNA (ALL USERS)
GEOT	REQUESTED SUPPORT
POLR	REQUESTED SUPPORT
SOHO	REQUESTED SUPPORT

Resource Allocation Review Requirements Analysis and Recommendations



2002 - Contention Period #29 - 26M

Late April - Early December (Weeks 17, 21, 25, 33, 41, 45, 49)

<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CLU2	ROUTINE SUPPORT, DSS-16, 46, 2 HRS	12 - 13
DSS	MAINTENANCE, 6 - 8 HRS	3
GEOT	ROUTINE SUPPORT, 1.1 HRS	21
INTG	ROUTINE SUPPORT, DSS-16, 7 HRS	6 - 7
POLR	ROUTINE SUPPORT, 1 - 2 HRS	35
SOHO	TSO AND ROUTINE SUPPORT, 1.6 - 8 HRS	23

<u>USER</u>	<u>RECOMMENDATIONS</u>
CLU2	REQUESTED SUPPORT
DSS	REDUCE DSS-46 TO 4 HRS AND DSS-66 TO 6 HRS (ALL USERS)
GEOT	REQUESTED SUPPORT
INTG	REQUESTED SUPPORT
POLR	REQUESTED SUPPORT
SOHO	MOVE 2 TSO PASSES TO DSS 24 IN ALL WEEKS EXCEPT WK 41; IN WK 41 REDUCE 2 TSO SUPPORTS TO 4 HRS USING DSS-27 (INTG)

Resource Allocation Review Requirements Analysis and Recommendations



2002 - Contention Period #30 - 26M
Late June - Mid-July (Weeks 26 - 29)

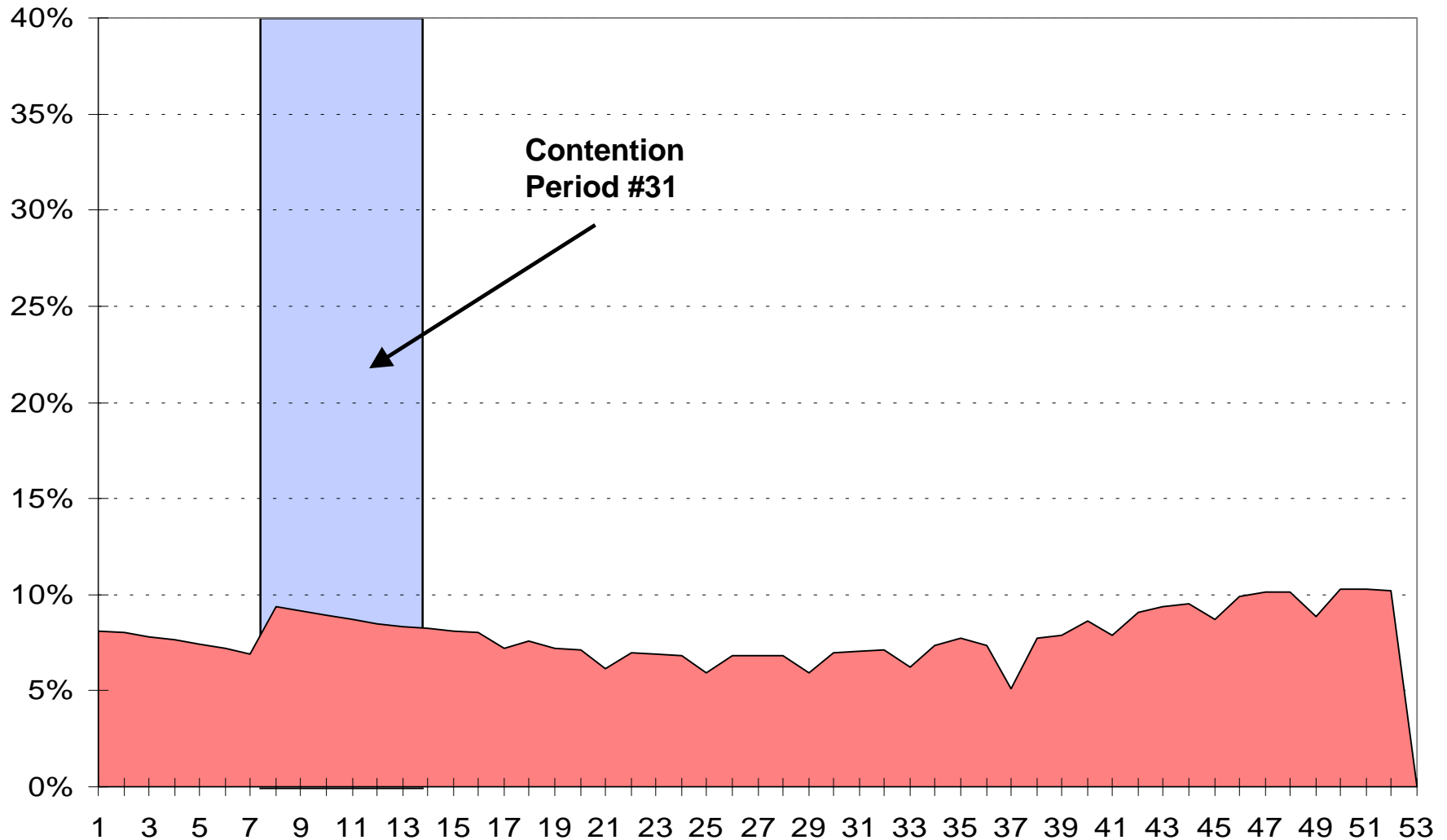
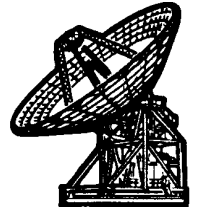
<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	DSS-66 SERVO HYDRAULIC DRIVE REPLACEMENT (DOY 175 - 202) ROUTINE MAINTENANCE, 6 - 8 HRS	3
CLU2	ROUTINE SUPPORT, DSS-16, 46, 2 HRS	12 - 13
GEOT	ROUTINE SUPPORT, 1.1 HRS	21
INTG	ROUTINE SUPPORT, DSS-16, 7 HRS	6 - 7
POLR	ROUTINE SUPPORT, 1 - 2 HRS	35
SOHO	TSO AND ROUTINE SUPPORT, 1.6 - 8 HRS	23

<u>USER</u>	<u>RECOMMENDATIONS</u>
DSS	DSS-66 REQUESTED DOWNTIME (DELETE ROUTINE MAINT) AND REDUCE DSS-16 AND DSS-46 MAINTENANCE BY 2 HRS
CLU2	REQUESTED SUPPORT
GEOT	REQUESTED SUPPORT USING DSS-16, 46, 34H
INTG	REQUESTED SUPPORT
POLR	REQUESTED SUPPORT USING DSS-16, 46
SOHO	REQUESTED SUPPORT USING DSS-16, 27, 24, 46 DELETE TSO IN WK 29

Resource Allocation Review

Requirements Analysis and Recommendations

2002 Weekly Contention Percent - 34HSB

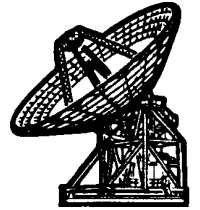




Resource Allocation Review

Requirements Analysis and Recommendations

2002 - Contention Period #31 DSS-27
January - March (Weeks 08 - 13)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	MAINTENANCE, 6 - 8 HRS	1
SOHO	HSO SUPPORT	7

<u>USER</u>	<u>RECOMMENDATIONS</u>
DSS	REDUCE SUPPORT BY 2 HRS (SOHO)
SOHO	REDUCE 1 PASS/WK TO 6 HRS (DSS)



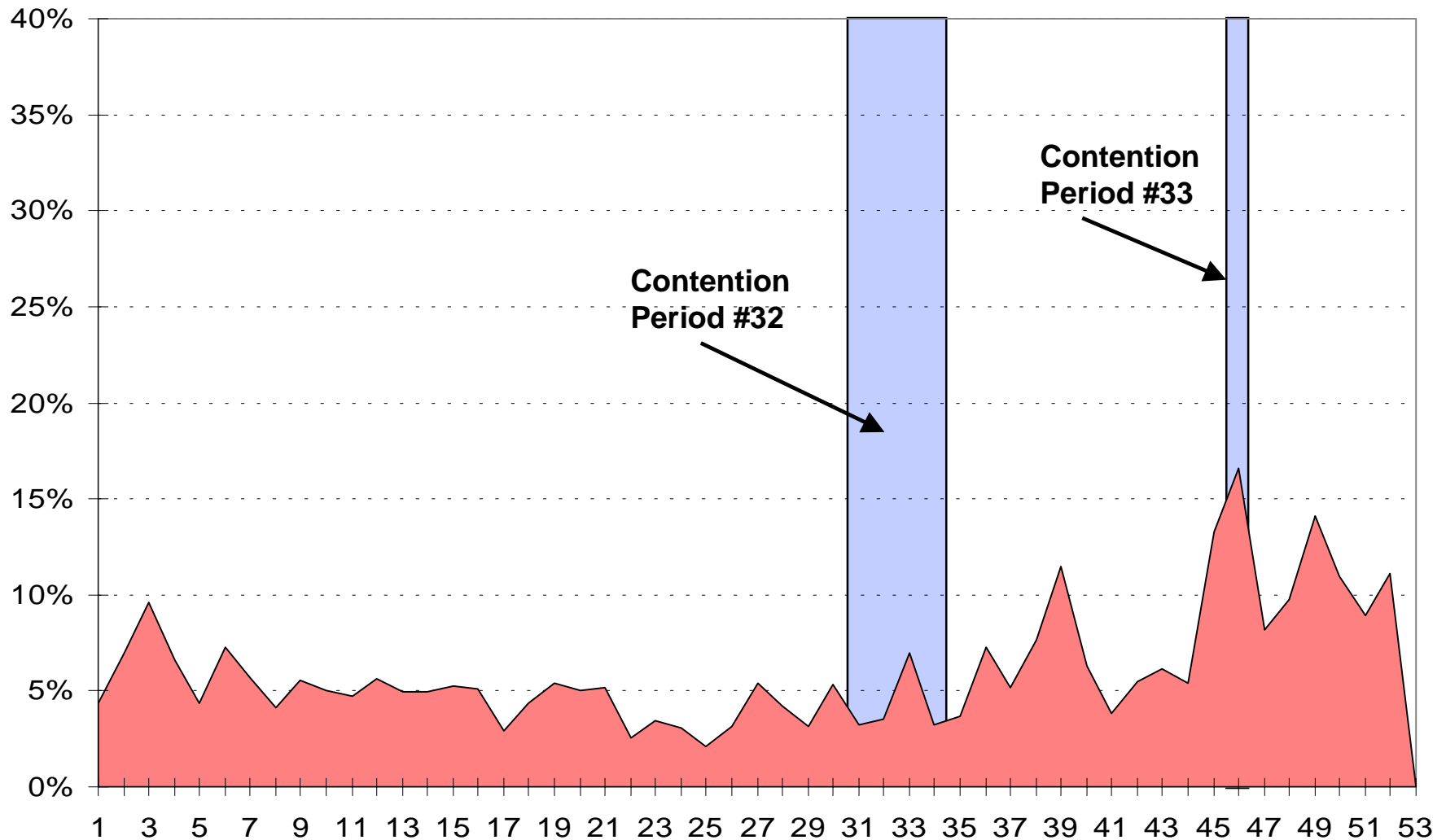
Resource Allocation Review Requirements Analysis and Recommendations

2003 Activities in Contention / Recommendations

Resource Allocation Review

Requirements Analysis and Recommendations

2003 Weekly Contention Percent - 70M



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #32 - DSS-63
Late July - Late August (Weeks 31 - 34)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u> (DOY 209 - 236)
DSS	BALL-JOINT/PAD REFURBISHMENT DOWNTIME	
DSN	ANTENNA CALIBRATION, WK 31 - 33	0 - 1
MAP	ROUTINE SUPPORT, 45 MIN	7
RASA	VLBA WCB (WK 32) AND RADIO STARS WCB (WK 33), DSS-14/63, 8 - 14 HRS	1
SVLB	SVLB AND RADA SUPPORT	4 - 5
VGR1	ROUTINE UPLINK, 2.5 HRS	0 - 1

<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REQUESTED DOWNTIME (DELETE ROUTINE/BEARING MAINT)
DSN	DELETE SUPPORT
MAP	REQUESTED SUPPORT USING DSS-14 AND 43
RASA	MOVE SUPPORT TO WK 30 AND 35
SVLB	DELETE SUPPORT
VGR1	REQUESTED UPLINK SUPPORT USING DSS-14 OR 43



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #33 - DSS-14
Late October - Early November (Week 46)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CNTR	ROUTINE SUPPORT	0 - 1
DSS	ROUTINE MAINTENANCE	2
GSSR	ASTEROID 1990OS, 8 HRS	4
	ASTEROID 1996GT, 5 HRS	3
MAP	ROUTINE SUPPORT, 45 MIN	2 - 3
M01O	MARS MAPPING SUPPORT	4 - 5
RASA	PLANET R/AST AND M-WAVE SPECT, 9 HRS	2
SVLB	ROUTINE SUPPORT	9



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #33 - DSS-14

Late October - Early November (Week 46) (Continued)

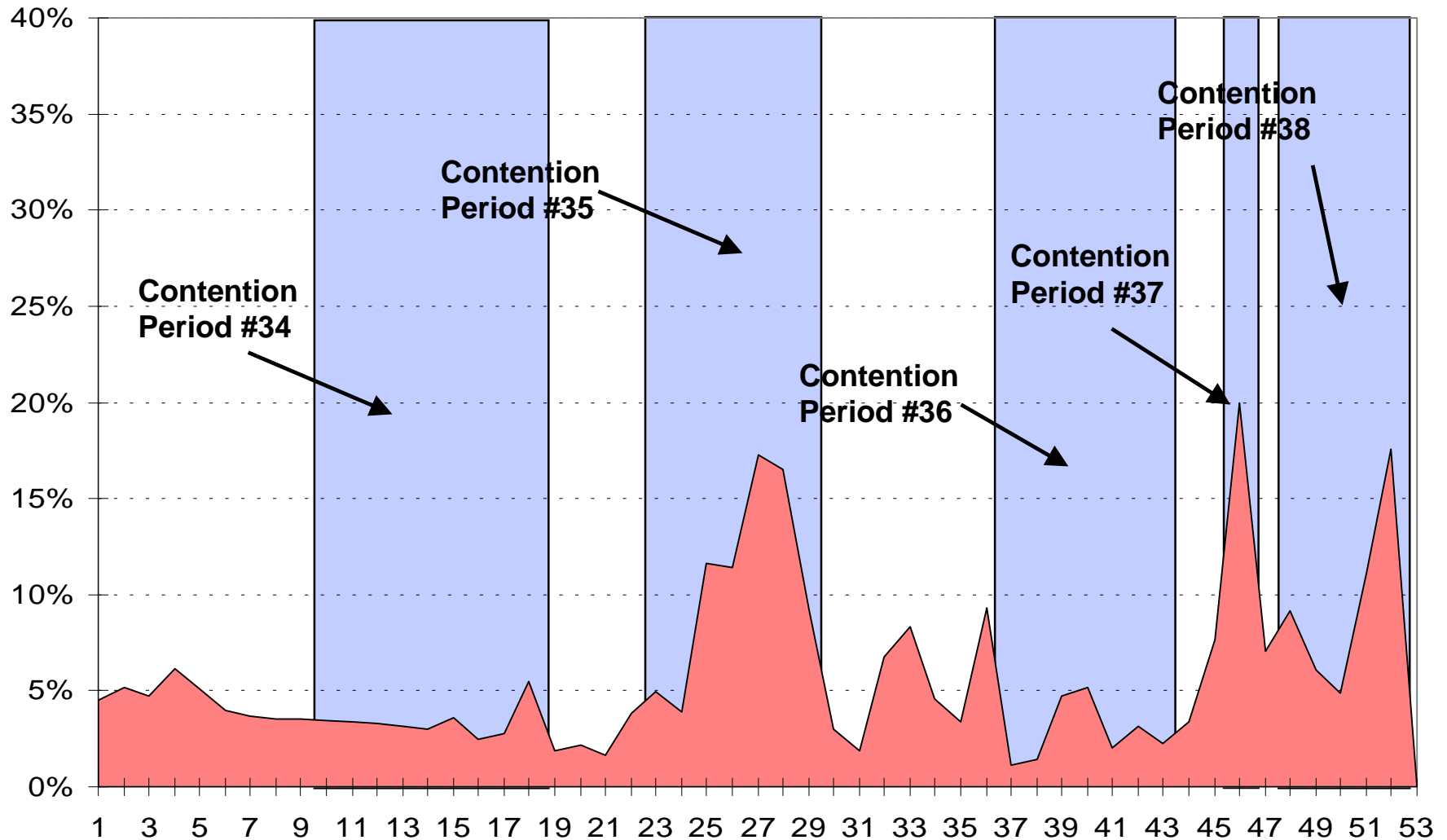
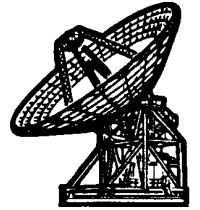


<u>USER</u>	<u>RECOMMENDATION</u>
CNTR	REQUESTED SUPPORT USING DSS-63
DSS	REDUCE TO ONE 6 HR MAINTENANCE SUPPORT (GSSR, M01O)
GSSR	REQUESTED SUPPORT
MAP	REQUESTED SUPPORT
M01O	REQUESTED SUPPORT
RASA	REDUCE TO 4 HRS (GSSR)
SVLB	REQUESTED SUPPORT

Resource Allocation Review

Requirements Analysis and Recommendations

2003 Weekly Contention Percent - 34HEF

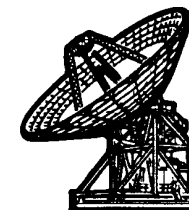




Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #34 - DSS-15
March - Mid-May (Weeks 10 - 18)

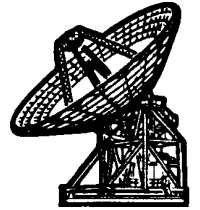


<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	ANTENNA CONTROLLER REPLACEMENT	(DOY 062 - 124)
DSN	CAT M&E, DSS 15/45, 15/65, WK 11 - 12, 17 - 18, 24 HRS	1
	CLOCK SYNC, DSS-15/65, WK 10, 12, 14, 16, 18, 4 HRS	1
GODR	ROUTINE SUPPORT DSS-14/15, WK 11, 13, AND 15	1
SGP	CRUSTAL DYNAMICS M4, WK 17, 24 HRS	1
SRTF	ROUTINE SUPPORT, 1 HR	2 - 3
SDU	ROUTINE SUPPORT, 6 HRS	0 - 1
VGR1	DTR ARRAY, DSS-14/15, WK 18, 7 - 8 HRS	3 - 6

Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #34 - DSS-15
March - Mid-May (Weeks 10 - 18) (Continued)



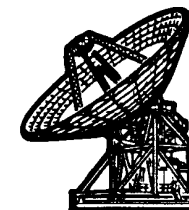
<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REQUESTED DOWNTIME (DELETE ROUTINE MAINTENANCE)
DSN	MOVE CAT M&E SUPPORT TO WK 08 - 09 AND 19 - 20 DELETE OR MOVE CLOCK SYNCs OUTSIDE DOWNTIME WEEKS
GODR	MOVE SUPPORT TO WK 19, 21, AND 23
SGP	MOVE SUPPORT TO WK 20
SRTF	REQUESTED SUPPORT USING DSS-25, 26, 45, 65, 34, 54
SDU	REQUESTED SUPPORT USING DSS-45 AND 65
VGR1	REQUESTED SUPPORT USING DSS-14/25 OR DSS-14/26



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #35 - 34HEF
June - Mid-July (Weeks 23 - 29)

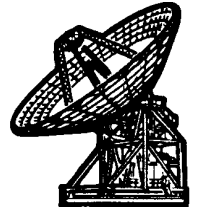


<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CAS	CONJUNCTION AND CRUISE, DSS-45, 65, 8 - 9 HRS	0 - 14
CNTR	EARTH GRAVITY ASSIST, WK 28 - 29, 4 HRS	5 - 7
DSN	CAT M&E, WK 23, 24, AND 29, 24 HRS	1
DSS	MAINTENANCE, 6 - 8 HRS	3
M03L	LAUNCH AND EARLY CRUISE	7 - 21
SGP	CRUSTAL DYN M4, DSS-45, 65, WK 23, 27, 28, 24 HRS	1 - 2
SRTF	ROUTINE SUPPORT, 1 HR	7
SDU	TCM SUPPORT, 4 - 8 HRS	2 - 14
VGR1	ROUTINE SUPPORT, DSS-15, 65	7

Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #35 - 34HEF
June - Mid-July (Weeks 23 - 29) (Continued)



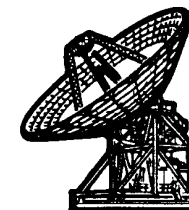
<u>USER</u>	<u>RECOMMENDATION</u>
CAS	REQUESTED SUPPORT
CNTR	REQUESTED SUPPORT
DSN	DELETE CAT M&E IN WK 23 - 24, AND MOVE WK 29 TO WK 31 (CAS, CNTR, M03L, SRTF)
DSS	REDUCE MAINTENANCE AT EACH STATION TO 4 HRS (CAS, CNTR, M03L, SRTF)
M03L	REQUESTED SUPPORT
SGP	DELETE SUPPORT IN WK 27 - 28 (CAS, CNTR, M03L, SDU)
SRTF	REQUESTED SUPPORT
SDU	REQUESTED SUPPORT
VGR1	REQUESTED SUPPORT



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #36 - 34HEF
Early September - Late October (Weeks 37 - 43)

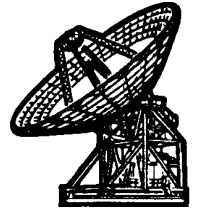


<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	DSS-45 ANTENNA CONTROLLER REPLACEMENT HOST COUNTRY, DSS-45, WK 37 AND 43, 12 HRS	(DOY 251 - 299) 1
CNTR	ENCKE ENCOUNTER AND CRUISE, 4 - 8 HRS	6 - 7
DSN	CAT M&E, DSS-15\45, 15\65, WK 41 - 42, 24 HRS	1
GODR	ROUTINE SUPPORT, DSS-14/15, WK 38, 40, AND 42	1
M03L	ROUTINE SUPPORT	7
SGP	CRYSTAL DYN M4, DSS-45, WK 39 - 40, 24 HRS	1
SRTF	ROUTINE SUPPORT, 1 HR	7
SDU	P/WILD 2 AND CRUISE SUPPORT, 6 - 8 HRS	1

Resource Allocation Review Requirements Analysis and Recommendations

2003 - Contention Period #36 - 34HEF

Early September - Late October (Weeks 37 - 43) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
DSS	DSS-45 REQUESTED DOWNTIME (DELETE DSS-45 MAINT AND HOST COUNTRY SUPPORT)
CNTR	REQUESTED SUPPORT USING DSS-15, 65
DSN	DELETE SUPPORT *
GODR	REQUESTED SUPPORT
M03L	REQUESTED SUPPORT USING DSS-15, 43, 65
SGP	DELETE SUPPORT
SRTF	REQUESTED SUPPORT USING DSS-15, 65, 25, 34, 54
SDU	REQUESTED SUPPORT USING DSS-15, 65

Note: deletion of DSN 15/65 CAT M&E is necessary to schedule other users to these antennas



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #37 - 34HEF
Mid-November (Week 46)



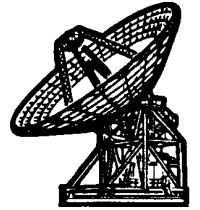
<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CAS	ROUTINE SUPPORT, 8 - 9 HRS	1
CNTR	ENCKE ENCOUNTER	21
DSN	CLOCK SYNC, DSS-15/65, 4 HRS	1
DSS	MAINTENANCE, 6 - 8 HRS	3
GODR	ROUTINE SUPPORT, DSS-14/15	1
M03L	TCM	10
SGP	CRUSTAL DYNAMICS M4, DSS-45, 24 HRS	1
SRTF	ROUTINE SUPPORT, 1 HR	7
SDU	P/WILD 2 AND TCM SUPPORT, 4 - 8 HRS	4
VGR2	NEGOTIATED SUPPORT, DSS-45	5



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #37 - 34HEF
Mid-November (Week 46) (Continued)



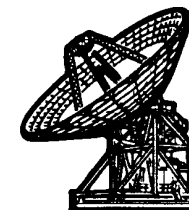
<u>USER</u>	<u>RECOMMENDATION</u>
CAS	REQUESTED SUPPORT
CNTR	REDUCE 1 DSS-65 PASS 1 - 2 HRS FOR MAINTENANCE (DSS)
DSN	REQUESTED SUPPORT
DSS	REDUCE DSS-15 AND 65 MAINTENANCE TO 4 HRS (CNTR, SDU)
GODR	REQUESTED SUPPORT
M03L	MOVE SUPPORT TO DSS-25, 34, 54 (CNTR)
SGP	MOVE SUPPORT TO WK 47 (CNTR)
SRTF	REQUESTED SUPPORT USING DSS-25, 34, 54 (CNTR)
SDU	REQUESTED SUPPORT
VGR2	REQUESTED SUPPORT



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #38 - 34HEF
Late November - December (Weeks 48 - 52)



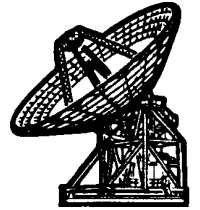
<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CAS	GRAVITY WAVE AND CRUISE, DSS-45, 65, 9 HRS	1 - 15
CNTR	ENCKE ENCOUNTER, WK 48 - 49	3 - 7
DSN	CAT M&E, DSS-15\45, 65, WK 48	1 - 2
	CLOCK SYNC, DSS-15/65, WK 48, 49 AND 52, 4 - 24 HRS	
DSS	MAINTENANCE, 6 - 8 HRS	3 - 4
	HOST COUNTRY, DSS-45, WK 52, 6 - 12 HRS	
GODR	ROUTINE SUPPORT, DSS-14/15, WK 48, 50, AND 52	1
M03L	APPROACH	14 - 21
SGP	CRUSTAL DYN M4, DSS-45, 65, WK 49 - 51, 24 HRS	1
SRTF	ROUTINE SUPPORT, 1 HR	7
SDU	P/WILD AND TCM SUPPORT, 4 - 8 HRS	16



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #38 - 34HEF
Late November - December (Weeks 48 - 52) (Continued)

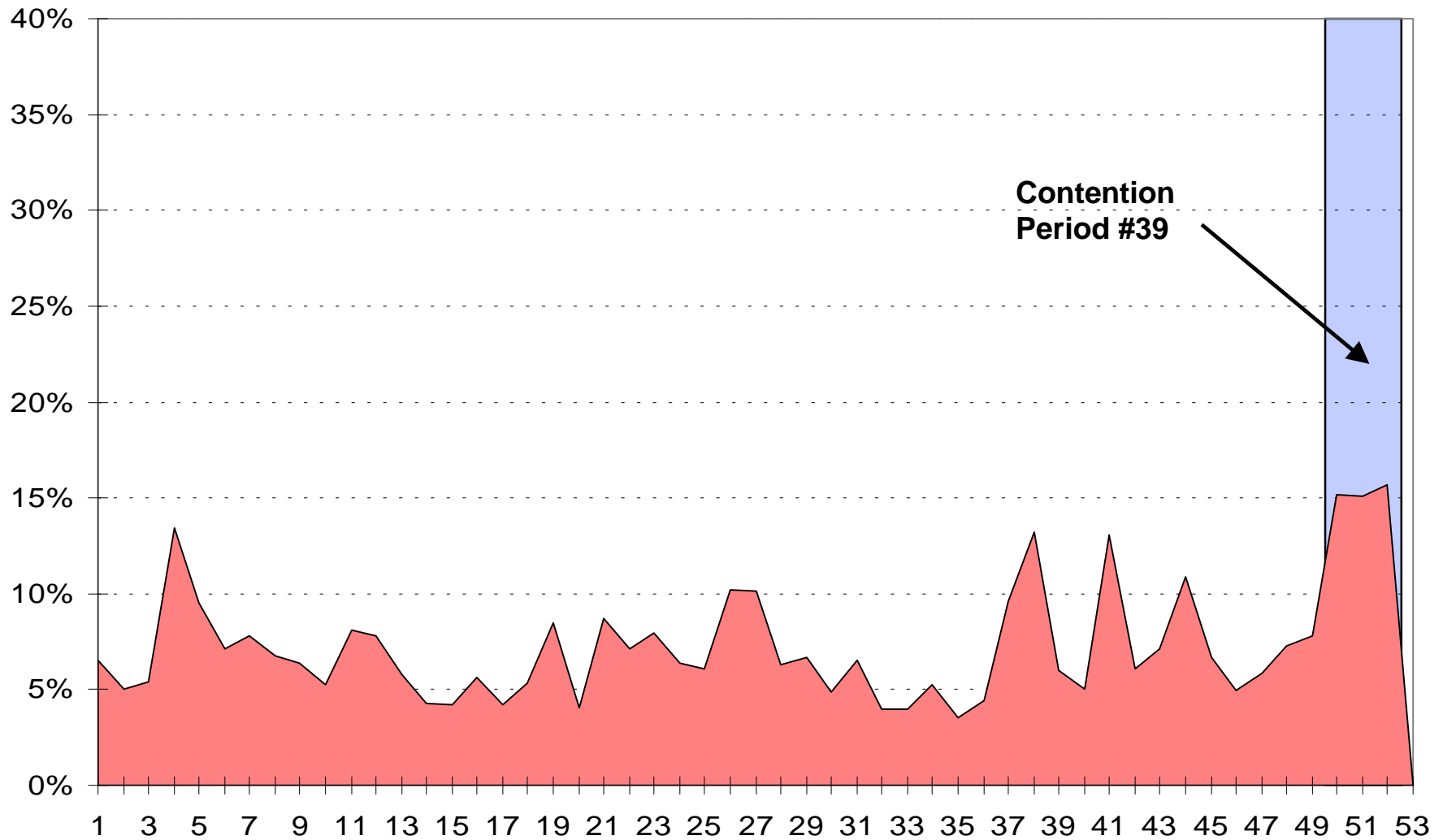
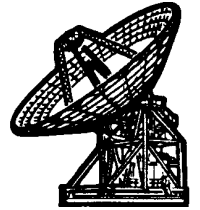


<u>USER</u>	<u>RECOMMENDATION</u>
CAS	REDUCE DSS-65 SUPPORT IN WK 52 TO 6 - 7 HRS/PASS (M03L)
CNTR	REQUESTED SUPPORT
DSN	REQUESTED SUPPORT
DSS	REDUCE DSS-15 MAINTENANCE TO 6 HRS AND DSS-45 AND 65 TO 4 HRS (M03L, SDU)
GODR	REQUESTED SUPPORT
M03L	REDUCE DSS-65 SUPPORT IN WK 52 TO 6 - 7 HRS/PASS (CAS)
SGP	DELETE SUPPORT IN WK 51
SRTF	MOVE SUPPORT TO THE 70M IN WK 48, 51 AND 52 (M03L)
SDU	REQUESTED SUPPORT

Resource Allocation Review

Requirements Analysis and Recommendations

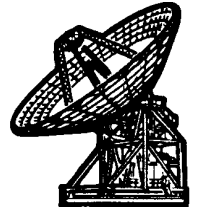
2003 Weekly Contention Percent - 34BWG1



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #39 - 34BWG1
November - December (Weeks 50 - 52)



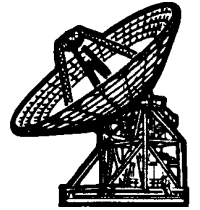
<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CHDR	ROUTINE SUPPORT, 1 HR	21
CLU2	INTERFEROMETRY, DSS-16/24, 46/34, 1 HR	1
DSS	MAINTENANCE, 6 - 8 HRS	3
MEO	CAPTURE, 12 HRS	7
PLNB	APPROACH AND CRUISE	10 - 11
SRTF	ROUTINE SUPPORT, 1 HR	1 - 5
ULYS	ROUTINE SUPPORT, DSS-24, 34, 5 - 8 HRS	11
VGR1	NEGOTIATED SUPPORT, DSS-34, 54, 4 HRS	7
VGR2	NEGOTIATED SUPPORT, DSS-34	7
WIND	ROUTINE SUPPORT, 2.5 HRS	7



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #39 - 34BWG1
November - December (Weeks 50 - 52) (Continued)

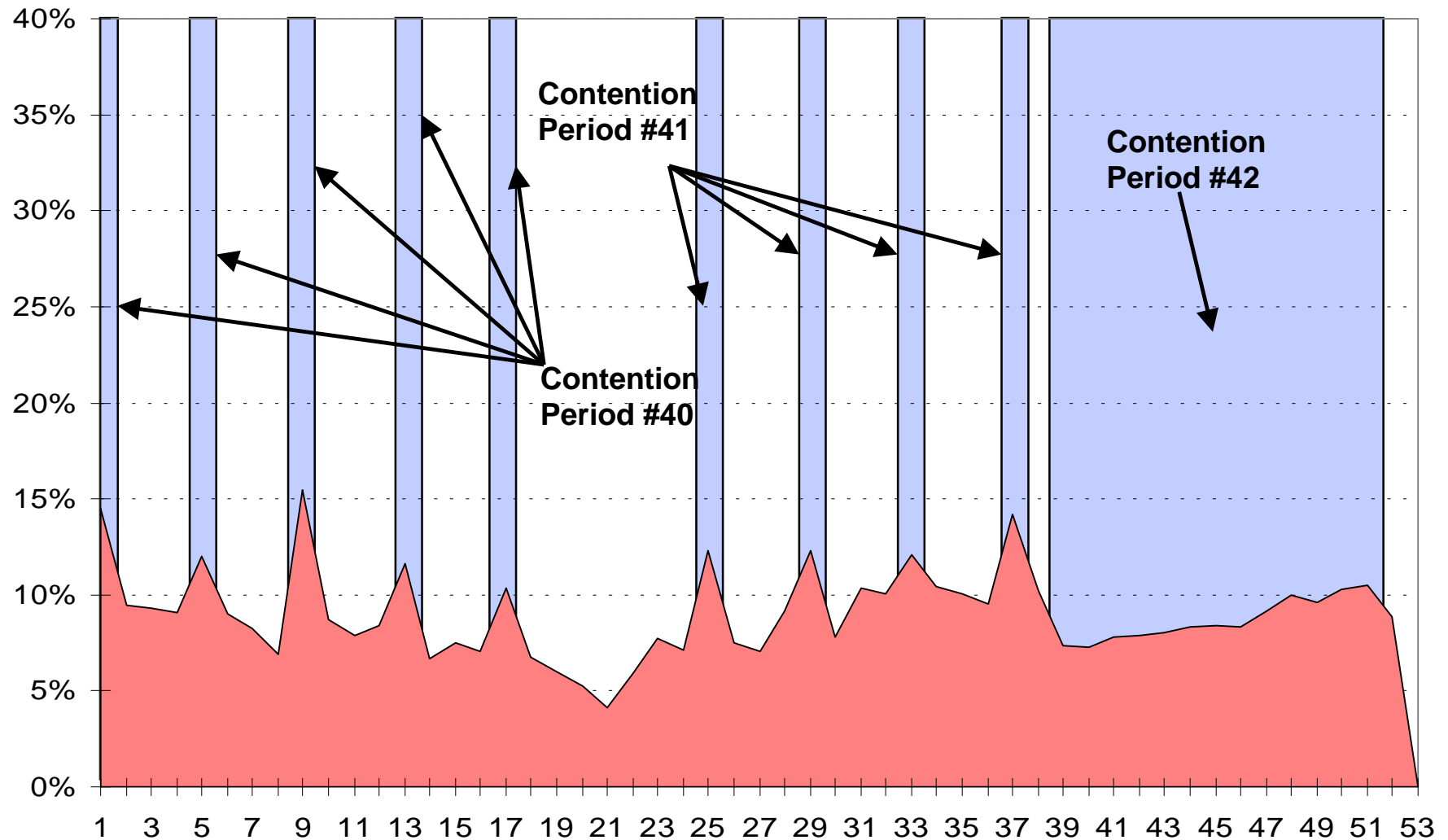


<u>USER</u>	<u>RECOMMENDATION</u>
CHDR	MOVE SUPPORT TO THE 26M (MEO, PLNB, VGR2, WIND)
CLU2	REQUESTED SUPPORT
DSS	REQUESTED SUPPORT
MEO	REDUCE TO 11 HRS/PASS (PLNB, SRTF)
PLNB	REDUCE APPROACH SUPPORT TO 7 HRS/PASS (MEO, SRTF)
SRTF	REQUESTED SUPPORT
ULYS	REQUESTED SUPPORT
VGR1	DELETE SUPPORT, USE SCHEDULED 8 HR/DAY AT DSS-26 (SRTF, ULYS, VGR2, WIND)
VGR2	REQUESTED SUPPORT
WIND	REQUESTED SUPPORT

Resource Allocation Review

Requirements Analysis and Recommendations

2003 Weekly Contention Percent - 26M



Resource Allocation Review Requirements Analysis and Recommendations



2003 - Contention Period #40 - 26M
January - Late April (Weeks 01, 05, 09, 13, 17)

<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CLU2	ROUTINE SUPPORT, 2 HRS	6
DSS	MAINTENANCE, 6 - 8 HRS	3
GEOT	ROUTINE SUPPORT, 1.1 HRS	21
INTG	ROUTINE SUPPORT, DSS-16	7
LUNA	ROUTINE SUPPORT, DSS-16, 66, 4 HRS	2 - 5
POLR	ROUTINE SUPPORT, 1 - 2 HRS	35
SOHO	TSO AND ROUTINE SUPPORT, 1.6 - 8 HRS	15 - 16
TDRS	LAUNCH, WK 09 (DOY 060 - 061)	4



Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #40 - 26M

January - Late April (Weeks 01, 05, 09, 13, 17) (Continued)



<u>USER</u>	<u>RECOMMENDATION</u>
CLU2	REQUESTED SUPPORT
DSS	REDUCE SUPPORT TO 6 HRS/WK AT EACH STATION (CLU2, INTG, LUNA, SOHO)
GEOT	REQUESTED SUPPORT
INTG	REQUESTED SUPPORT
LUNA	REQUESTED SUPPORT
POLR	REQUESTED SUPPORT
SOHO	DELETE TSO SUPPORT IN WK 09 (TDRS)
TDRS	REQUESTED SUPPORT

Resource Allocation Review

Requirements Analysis and Recommendations



2003 - Contention Period #41 - DSS-16, 66
Mid-June - Mid-September (Weeks 25, 29, 33, 37)

<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CLU2	ROUTINE SUPPORT, DSS-16, 2 HRS	6
DSS	MAINTENANCE	2
GEOT	ROUTINE SUPPORT, 1.1 HRS	14
INTG	ROUTINE SUPPORT, DSS-16	7
LUNA	ROUTINE SUPPORT, DSS-16, 66, 4 HRS	2 - 6
POLR	ROUTINE SUPPORT, 1-2 HRS	23 - 24
SOHO	TSO AND ROUTINE SUPPORT, 1.6 - 8 HRS	15 - 16

<u>USER</u>	<u>RECOMMENDATION</u>
CLU2	REQUESTED SUPPORT
DSS	REDUCE TO 4 HRS/WK AT EACH STATION (CLU2, INTG, LUNA, SOHO)
GEOT	REQUESTED SUPPORT
INTG	REQUESTED SUPPORT
LUNA	REQUESTED SUPPORT
POLR	REQUESTED SUPPORT
SOHO	SPLIT 5 TSO PASSES INTO TEN 4 HR SUPPORTS USING DSS-14, 16 (CLU2, INTG, LUNA)

Resource Allocation Review Requirements Analysis and Recommendations



2003 - Contention Period #42 - DSS-46, 66
Late September - Mid-December (Weeks 39 - 51)

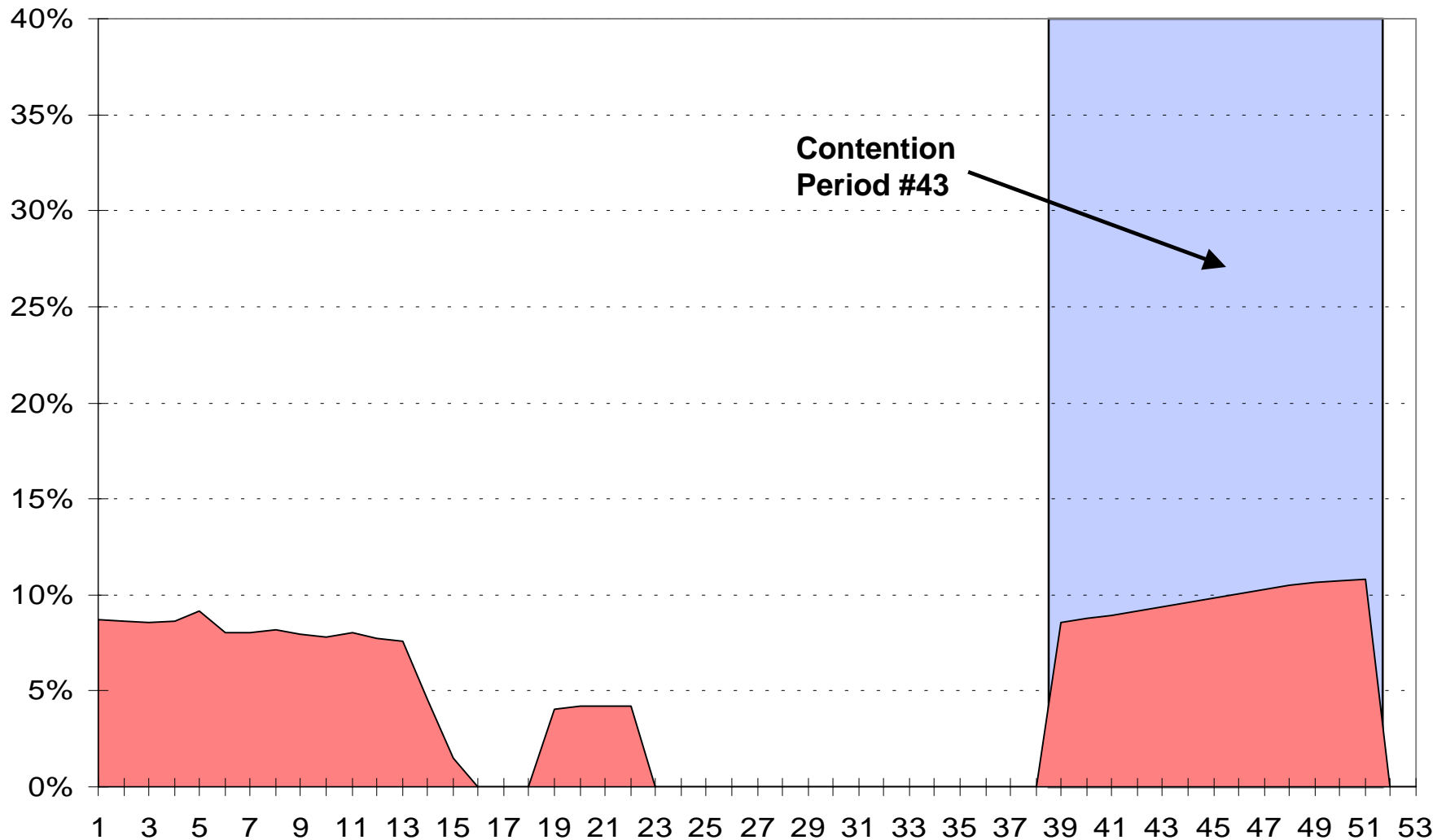
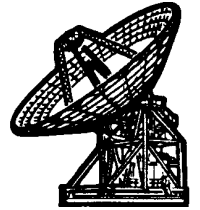
<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
CLU2	ROUTINE/INTERFEROMETRY SUPPORT, 1 - 2 HRS	6 - 7
DSS	MAINTENANCE, 6 - 8 HRS	2
GEOT	ROUTINE SUPPORT, 1.1 HRS	14
POLR	ROUTINE SUPPORT, 1 - 2 HRS	23 - 24
SOHO	HSO SUPPORT	14

<u>USER</u>	<u>RECOMMENDATION</u>
CLU2	REQUESTED SUPPORT
DSS	REDUCE MAINTENANCE AT EACH STATION BY 2 HRS/WK (SOHO)
GEOT	REQUESTED SUPPORT
POLR	REQUESTED SUPPORT
SOHO	REQUESTED SUPPORT

Resource Allocation Review

Requirements Analysis and Recommendations

2003 Weekly Contention Percent - 34HSB





Resource Allocation Review

Requirements Analysis and Recommendations

2003 - Contention Period #43 - DSS-27
Late September - Mid-December (Weeks 39 - 51)



<u>USER</u>	<u>CONTENTION</u>	<u>PASSES/WK</u>
DSS	MAINTENANCE	1
SOHO	HSO SUPPORT	7

<u>USER</u>	<u>RECOMMENDATION</u>
DSS	REDUCE MAINTENANCE TO 6 HRS (SOHO)
SOHO	REQUESTED SUPPORT



Resource Allocation Review

Supporting Material

May be found on the RAPSO WWW Homepage at:

<http://rapweb.jpl.nasa.gov>

- ◆ Ongoing Users Negotiated Requirements
Individual User Loading Profiles
- ◆ Resource Allocation Review Board Information
Supplemental Yearly Information containing
Major Events Timeline
User Loading Profiles
Monthly Subnet Support Projection



Resource Allocation Review Requirements Analysis and Recommendations

Contentions resolved prior to RARB Meeting

<u>Subnet</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
70M		5	1
34H	2		
34B1	11	1	
34B2	5		
34HSB	1	1	1
26M	2	3	3
Totals	21	10	5